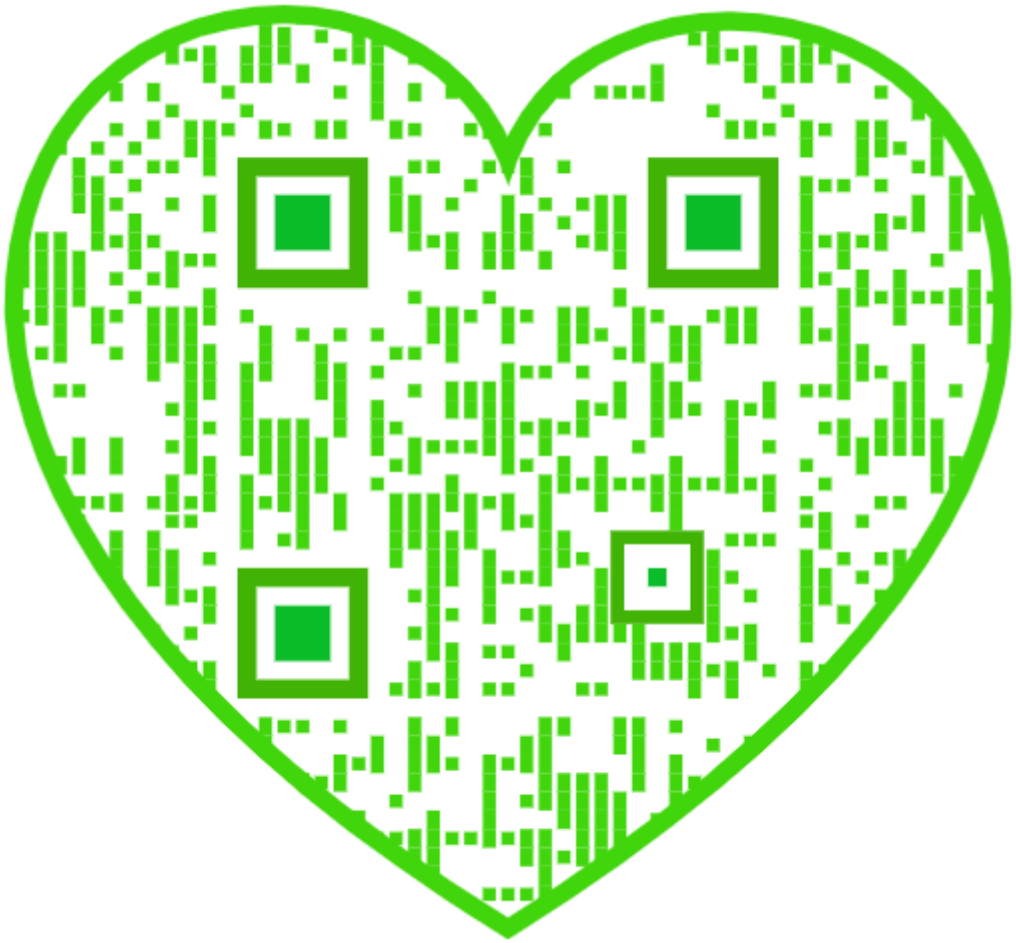
FOWLS FOR THE TIMES

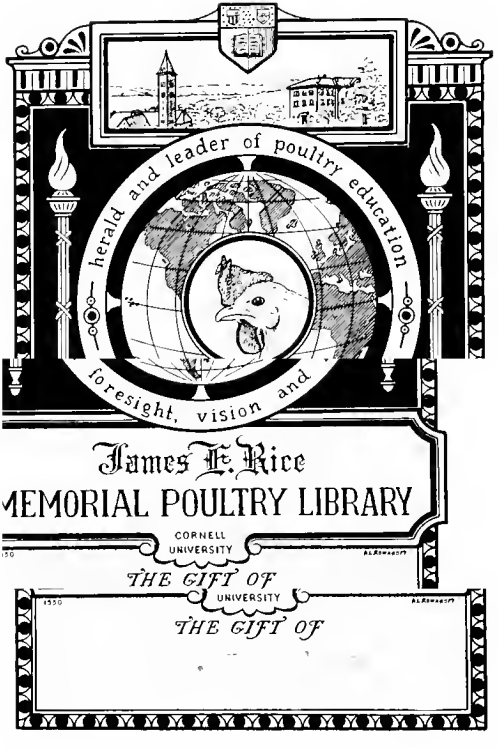
THE HISTORY AND DEVELOPMENT
OF THE

ORPINGTON FOWL

BY W. COOK
(ORIGINATOR OF THE BREED)

2/6
NETT.




herald and leader of poultry education
foresight, vision and
James E. Rice
MEMORIAL POULTRY LIBRARY
CORNELL
UNIVERSITY
THE GIFT OF
UNIVERSITY
THE GIFT OF

The original of this book is in
the Cornell University Library.

There are no known copyright restrictions in
the United States on the use of the text.

http://www.archive.org/details/cu31924090115159

Faithfully yours,
F. Cook

FOWLS FOR THE TIMES

THE

HISTORY AND DEVELOPMENT

OF THE

ORPINGTON FOWL

BY

WILLIAM COOK

(ORIGINATOR OF THE BREED).

Author of "The Poultry Breeder and Feeder: or how to make Poultry pay;" "The Book on Ducks, and how to make them pay;" "The Horse: its keep and management;" "Pheasants, Turkeys, and Geese: their management for pleasure and profit;" Editor and Proprietor of "The Poultry Journal;" Conductor of Poultry Department "Farm, Field and Fireside;" Contributor to many other weekly poultry papers; Technical Education Lecturer on Poultry Subjects to County Councils of Lincolnshire, Cheshire, Lancashire, Bedfordshire, Huntingdonshire, Northamptonshire, Dorsetshire, Essex, Kent, Middlesex, and Warwickshire; in many provincial districts for Landowners, and others in connection with various Societies and Clubs.

PRICE 2/6 NETT.

PUBLISHED BY THE AUTHOR AT

ORPINGTON HOUSE, ST. MARY CRAY, KENT.

LONDON AGENT:

E. W. ALLEN, 4, AVE MARIA LANE, LONDON, E.C

ENTERED AT STATIONERS' HALL

M.H.

SF
489
O 8
C77
E 4516

BROMLEY, KENT:
E. CLARKE & SON,
PRINTING WORKS, 53, HIGH STREET,
AND AT ST. MARY CRAY.

TO MY WIFE,

WHO HAS SHARED MY STRUGGLES

AND

REJOICED IN MY TRIUMPHS,

THIS LITTLE WORK

IS

AFFECTIONATELY INSCRIBED.

CONTENTS.

	Pages.
Preface	...
Introductory Remarks	1—13
The Poultry World and its Necessities ...	15—31
Needs—Hindrances—Ignorance makes action fatal—Crossing, Nature's own remedy for deterioration—Natural selection *versus* Artificial selection.	
The Author's Characteristic Theories ...	33—55
Excellence—Profit for pains—Waste, want, worry—Colour of Eggs—Langshans, their great virtues and failings—American breeds—French and foreign imports and home industries.	
Orpingtons of the Future	57—95
The Author's intention when he originated Orpingtons—Improvements—Work in general—Farmers' fowls—Lincolnshire Buffs *versus* Buff Orpingtons—Careful breeding and profitable results—Farmers' fowls as Scavengers.	
Orpingtons as Poor Men's Fowls	97—105
Back-yard Poultry-keepers—Needs and necessities—Orpingtons suit all round—Birds for the times—Working Men as Orpington Breeders.	
The Orpington Club	107—108
Inception — Prosperity — Divisions in the Ranks—Acrimonious officials—The future of the Club.	
Orpingtons in the Show Pen	109—121
Types—Varieties—Standards—Judging—The Types of the future—Show Orpingtons and utilitarian qualities—Orpingtons must be first-class all round to be good Orpingtons—Orpingtons for all classes of fanciers.	

PAGES.

THE PRESERVATION OF THE BREEDS. ... ... 123—128
Orpingtons will not die out—Fresh blood—Laying Strains—Colouring—Sports—Developments—The Author's watchfulness—Hopes for the future—Orpingtons for the multitude.

ORPINGTONS FOR CROSSING ... ... 129—135
Popular Crosses of the past—Popular Crosses of the future—New breeds: new characteristics—American enterprise and English genius — Orpingtons for combining the excellences of the breeds—Orpington Crosses for Eggs all the year round.

ORPINGTONS FOR MARKET ... ... 137—145
Market requirements—Orpingtons for Hucksters—Orpingtons for Table—Orpington—Game crosses for excellence and white flesh—Failings and how to overcome them—The run of the markets—Salesmen and Orpingtons—Farmers and fowl prices—Incubators for market hatching—Past failures; present hopes; future victory.

ORPINGTONS AS RICH MEN'S FOWLS. ... ... 147—150
Plumage suitable—Appearance grand—Variety is charming—Grass runs for Orpingtons—Orpingtons, the table birds of the future—Poultry-men and Poultry-women and Orpingtons.

ORPINGTONS A BREED, NOT A VARIETY ... ... 151—162
Breeds—New Breeds—American Breeds—English lethargy — Foreign Breeds and reception by English breeders—"A Prophet is not without honour, save in his own country and in his own house"—Hardiness, comprehensiveness and excellence—Orpingtons will rule the Poultry world, as "Britannia rules the waves."

THE AUTHOR'S GREETING AND THANKS TO THE POULTRY WORLD ... ... 163—165
Career—Kindness of Friends—Enmity of jealous old breeders—Vindication of position—The majority rules—Agree to differ—Let actions and facts speak plainer than words.

LIST OF ILLUSTRATIONS.

	PAGE
Portrait of Author	Frontispiece
Belted Beauty moth	78
Black Rose-comb Orpington cock	108
Black Rose-comb Orpington hen	109
Black Orpington cock	110
Black Orpington hen	111
Buff Orpington cock	118
Buff Orpington hen	119
Figure of eight moth	79
Hearson's Champion Incubator	144
Lacky moth	76
Mottled Umber moth	80
Pale Brindled Beauty moth	81
Pale Oak Beauty moth	79
Rose-comb White Orpington cock	114
Rose-comb White Orpington hen	115
Rose-comb Buff Orpington cock	116
Rose-comb Buff Orpington hen	117
Small Ermine moth	77
Small Brindled Beauty moth	78
Scarce Umber moth	81
Single Comb White Orpington cock	112
Single Comb White Orpington hen	113
Winter moth	80

INDEX.

	PAGE
Agricultural decline	2
Advantages gained by cross-breeding	24
Ancient peoples and poultry breeding	27
American breeds: introduction and reception ...	42
Agriculture and poultry-keeping	48
American breeds: advancement and improvement ...	58
Agriculturists and reform	70
Author's experience with fruit land	93
All round birds for backyards	101
Agricultural depression	103
American enterprise and English advancement ..	132
Artificial incubation and economy	144
American energy and its influence on British poultry	158
Author's reminiscences	163
Author's bow	165
Birds of the old times	35
Books and balance sheets	36
Bad results the outcome of incompetency	39
Brown eggs for market and home	40
British possessions: imports from	45
Britain for the British: home producers' position ...	48
British perseverance and its results...	48
Backyard poultry-keepers' produce: how to dispose of	54
Barn door fowls *versus* modern breeds for laying ...	65
Bad layers and lack of interest	65
Backyard poultry-keepers: stock for	99
Backyard poultry-keeping: conditions of success ...	101
Breeds of the future	119
Boston fowls	139

	PAGE
Buff Orpingtons for farmyards	142
Buff Cochins and leg feathering	156
Buff Orpington excellences	157
Continental poultry systems	1, 9
Commercial pursuits	2
Comprehensiveness in poultry keeping	18
Combination of excellences the principle of future success	20
Cross-breeding: Nature's own saving clause ...	21
Combination of characteristics in birds of the future...	34
Cross-bred birds and profitable poultry keeping ...	37
Continental imports and importation	45
Crises and development	50
Co-operation for disposal of poultry produce... ...	55
Cross-breeding: its influence on fowl life	60
Chickens in plantations: system of cooping	82
Chicken life and earth worms	86
Continental poultry keepers: character of	97
Conditions of future success in poultry keeping ...	99
Continental imports *versus* home produce	99
Conservative policy fatal to true development ...	108
Calls to action	121
Comprehensiveness of Orpingtons	123
Colouring of varieties	124
Crossing	129
Cross-breeding of the past	129
Cross-bred birds *versus* pure	131
Cross-bred birds for economical poultry keeping ...	132
Cross-breeding and discovery	160
Characteristics of true Orpingtons	161
County Councils and poultry advancement	164
Derelict land	3

	PAGE
Darwin's theory as to new breeds	22
Darwin on variety in breeds	26
Darwin being dead, yet speaketh, and facts uphold his theories	30
Domestic poultry and game	34
Details of the new management	71
Ducks as scavengers	75
Ducks: habits in wild state perpetuated when domesticated	76
Ducks and earthworms	76
Ducks at feeding time	88
Destruction of wireworm: methods of	91
Ducklings for destruction of wireworm	92
Development of Orpingtons	125
Difficulties in breeding overcome	155
Defects and their disappearance	158
English development	2
English farmers' short-sightedness	5
English economy and excellence	33
Excellence: the true foundation of success	33
Excellence in fowls: what it means	34
Economy, and systems ensuring success	38
Excellence and victory	59
Englishmen and facts	66
Expedients for pest destroying	83
Earthworm burrowings: manuring properties of ...	85
Earthworms: Nature's own food for birds	85
Earthworms: anatomy of	86
Effects of fowl manure on fruit orchards	94
Educational influences of Orpingtons	110
Extraction of Orpingtons	111

	PAGE
Excellence in poultry and successful advance ...	116
English public and poultry-keeping	116
England's future and poultry-keeping	126
Educational results of cross-breeding	130
English objections overcome	153
Enmity and enthusiasm	164
Farmers' and fruit growers' opportunities	6
Farmers' wives as poultry-keepers	6
Farmers' waste grain: how to utilize	7
Future prospects and means to ensure success ...	17
Fancy, not fact, the theory of the past	22
Facts must eventually rule out ignorance	25
Fanciers of the old days, and their influence upon breeds	28
Feeding fowls	37
Feather on legs: objections to	42
Farmers and Continental imports	46
Farmers' management	47
Foreign produce *versus* English	47
Farmers to the rescue!	51
Free land to compensate for free trade	60
Facts for poultry-keepers	61
Future action: how to induce	62
Farmers and their opportunities of reform	62
Farmers' fowls: old and new	62
Farmers' poultry: why not the best?	63
Farmers' advantages: up and doing	63
Farmers utilize their produce	67
Farmers' situation and insect food	72
Fruit growers' enemies: moths and caterpillars ...	79
Fowls for clearing plantations	80
Fowls' food: Nature's own	87

	PAGE
Farmers as duck rearers	93
Future of poultry keeping in England	99
Fresh blood and Orpington cockerels	100
Fresh blood for vitality	124
Future crosses and improvements	131
Farmers and market supply	138
Fowl prices in London markets	140
Farmers' bad results and improved prospects ...	144
Future of English poultry-keeping	145
Farmers and increased profits	161
Fraud and duplicity	161
Government assistance for schemes of improvement ...	51
Good blood and skilful breeding work wonders ...	59
Good poultry for English markets	61
Green food for poultry	73
Grass Orchards *versus* dug plantations	80
Grass orchards for profit	83
Grit for fowls	85
Geese for farmers	89
Geese: laying results of	90
Greetings to fanciers	120
Game crosses and Orpingtons	143
How Orpingtons were first thought of	34
Help for struggling Agriculturists	55
Hop growers: chickens for clearing pests	77
Hop growing experiments aud successes	77
Higglers	139
Industry the great need of the times	12
Intercourse with poultry keepers	15
Inbreeding unnatural	21

	PAGE
Intelligent breeding and vast improvement	24
Influences that have caused breeds to differ	28
Incompetent poultry keepers grumble	39
Ignorance, waste, and worry	39
Insect life and waste corn in harvest fields	73
Indian Runner ducks: laying results of	88
Infested fields: how to deal with	92
Introduction of varieties of Orpingtons	110
Ignorance and folly	111
Incubators *and* Incubators	145
Imperfections and scientific breeding	157
Judging of the future	117
Labourers and poultry-keeping	7
Lincolnshire farmers: their opportunities for poultry-keeping	8
Langshans and their influence in the formation of Orpingtons	41
Langshans: introduction and reception	41
Langshans: old breeders' disputes as to origin ...	42
Langshans: laying qualities of	42
Light railways: their bearing upon poultry-keeping ...	52
Legislation and poultry-keeping	62
Lincolnshire farmers' ingenious methods	66
Laying statistics, old and new school	66
Lincolnshire Farmers welcome Orpingtons	67
Linconshire Buffs superseded by Buff Orpingtons ...	68
Lincolnshire Buffs: their honoured past	68
Lincolnshire Buffs: breeding and development ...	68
Lincolnshire farmers and Buff Orpingtons	69
Lincolnshire duck keepers	89

	PAGE
Lord Winchilsea's scheme of centralization ...	127
Lincolnshire farmers and market produce	141
Leg feathering: its curse and removal	153
Man's work to govern and be blessed	26
Methods and management for poultry-keeping ...	57
Mustard beetles: their ravages and how to check ...	74
Market poultry	137
Market requirements	141
Manipulation of breeds in forming Orpingtons ...	153
New breeds and new results	43
New breeds and laying qualities	44
North Country mighty men and their work ...	49
Northern farmers: their skill and perseverance ...	51
Needs and necessities: helps for the struggling ...	51
Nature's terms for sound constitutions	54
Nature's wise plans for wild birds	84
Northampton boot operatives as poultry-keepers ...	97
Negligence of poultry keepers producing disaster ..	101
Orpingtons and British farmers	10
Orpingtons in the show pen	12
Old time management and apathy	19
Old time ignorance, present research, future enlightenment	19
Origin of species in fowl life	21
Orpingtons: the best proof of the correctness of Darwin's contentions	23
Old breeds and new breeds: difference	25
Orpingtons: the result of intelligent breeding ...	26
Orpingtons: the fact that subdued theories... ...	35
Over-fed fowls: useless and unprofitable	38
Orpingtons lay brown eggs	41

	PAGE
Orpingtons: table qualities	44
Orpingtons and American breeds	44
Orpingtons: vitality and development	59
Orpingtons: their development and introduction ...	60
Orpingtons for the position	61
Orpington crosses for rapid improvement	67
Orpingtons and backyard poultry-keepers	98
Orpington Club	107
Orpingtons for showing	109
Orpington type	109
Orpington breeding of the future	116
Orpington Club: advice to	120
Orpingtons to the front	128
Old crosses and defects	131
Orpington cockerels for farmyard fowls	133
Orpingtons for producing layers	134
Orpingtons as winter layers	134
Orpingtons and laying results	134
Orpingtons for rich men	148
Orpingtons: useful and ornamental	148
Orpingtons and new departures	151
Orpington breeds and Darwinian theories	152
Orpington varieties and their extraction	152
Orpingtons and various climates	154
Old breeders and the introduction of Orpingtons ...	158
Opposition and contempt	159
Orpingtons at the beginning	160
Orpington fever	160
Parish Councils and poultry-keeping	11
Principles of success in poultry-keeping	16
Poultry keepers' fallacies	16

	PAGE
Poor fowls yield poor profits	18
Poultry keepers' privileges...	19
Poultry farming: ignorance not bliss	20
Past hindrances; present encouragements	20
Principles that produce success	20
Principles that have helped to form varieties ...	29
Principles that make Orpingtons most natural and scientific	30
Poultry-keeping progressive proves Darwin correct ...	31
Profit for poultry-keepers	35
Poultry-keeping, profitable and otherwise	38
Progress in breeds begun	43
Pork *versus* poultry for profit	47
Prices: English *versus* foreign produce	47
Poultry-keeping under new conditions	53
Poultry-keeping for ready-money	53
Proprietors at a disadvantage	64
Poultry literature and poultry reform	70
Poultry breeding: excellence in for future success ...	70
Pheasant rearing for farmers	90
Poisonous dressings *versus* fowls	92
Political economists and poultry-keeping	102
Poultry-keeping of the future and safety for ...	104
Privileges of present day enthusiasts	105
Popularity of White-Orpingtons	108
Preservation of excellence in Orpingtons	126
Popular tastes and increased profits	143
Profit for farmers	144
Past failure, future profits...	147
Poultry men and women, and Orpingtons	149
Poultry men and women: their troubles and difficulties	149
Progress slow in breeds	151

	PAGE
Points of excellence in various Orpington varieties ...	152
Remedies for distressed agriculturists	4
Railway rates and radical changes	10
Revolution, moral *versus* physical	50
Remedies for insect pests	79
Rapid spread of Buff Orpingtons	108
Rich men and good poultry	147
Rose-Comb: a freak of nature	156
Submerged tenth and poultry keeping	4
Social and political problems solved by poultry keeping	8
Science and stupidity	21
Stumbling block of ignorant breeders	23
Selection of best birds for laying	24
Savage races and artificial selection	26
South American savages and poultry breeding ...	27
Source of breeds; probable causes of variation ...	28
Stock farming: poultry keeping in relation to ...	53
Small holders' plans and poultry	54
Struggling Englishmen and how to help them ...	57
Success and enthusiasm	58
Selection, Nature's own method	59
Show pen and fancy not the arena of future success	61
Small holders and finance	63
Stability of small holders and poultry-keeping ...	64
Stock Geese: treatment of	89
Small holders and poultry keeping	103
Standard of Orpingtons	112
Standard of Rose-Comb Orpingtons	113
Standard of White Rose-Comb Orpingtons	113
Standard of White Single-Comb Orpingtons ...	114
Standard of Buff Rose-Comb Orpingtons	114

	PAGE
Scale of points for judging Orpingtons	115
Show pen disqualifications for Orpingtons	115
Show *versus* market in the future	118
Sports	124
Salesmen's needs	137
Small producers for large numbers	138
Surrey v. Sussex fatteners	138
Several strains for security and stamina	157
Science and advancement	158
Trickery and fraud in poultry dealing	16
Turkeys: foreign and home reared...	46
Turkeys: successful breeding of for market ...	47
Turkeys, Geese and Guinea Fowls for fruit-growers ..	53
Top fruit growing and poultry	81
Town poultry-keepers	98
Utility for the times	60
Utility the watchword of the hour	117
Variation in breeds to-day	29
Vermin on farms: fowls for clearing off	79
Vitality of Orpingtons in confined runs	98
Waste, worry and vermin	18
Weakness and mis-management	37
Worms as fowl food	71
Wireworms: how to deal with	75
Wireworms in hop garden: how to clear	78
Worms and their influeuce in bird life	84
Working men and powers for future prosperity ...	104
"Wastrels:" their mission and influence	118
"Wastrels" and the Orpington breed	154
White Orpington laying results	155

PREFACE.

I MAY, perhaps, be permitted, in sending forth my new book, to say, in a few words, what my aims and ideas are in connection with the theories and advice as to poultry management upon farms, &c., which it advocates.

The most casual observer of current events will have become impressed with a sense of the great necessity which exists for reformation in the ways and means which have governed agricultural pursuits in the past, so as to adapt them to present needs.

The Orpington fowls have been brought into existence as part of a great plan I have under consideration for infusing into farming pursuits a new element of profitable poultry-keeping, which shall, while it adds new vigour to the industry, serve to correct the uncertainty which has continued to increase since the ports of England were thrown open by free trade to the produce of the world, and the English farmer, unable to hold his own, has gradually receded from his once important position to rely upon his hardly held prestige, and to hope for better times.

I have made it my business to study many of the problems connected with the subject upon the spot, and have to acknowledge with gratitude much kindness, as well as many useful hints, which farmers and others I have visited have given me to help to swell the tide of useful information which, as a result of its publication in this book, I trust may serve to set people to work to bring in better days and many more advantages to a class of men of whom England has always been justly proud.

Orpingtons are suited to almost all conditions under which poultry can be kept, offering in the several varieties that choice which is always welcome, and such a difference of characteristics as make it possible for poultry-keepers of all classes to keep one or other of the varieties and do well with them.

Bespeaking for this book a careful perusal, and for its contents and teaching a fair and unprejudiced trial, I send it forth upon its mission, trusting it will serve to perpetuate that first truth as to poultry-keeping upon which I launched my interest in it as a pursuit so many years ago, and help farmers and others in spite of bad times in connection with many other things to live and learn "How to make poultry pay."

WILLIAM COOK.

ORPINGTON HOUSE,
ST. MARY CRAY, KENT.
August 17th, 1896.

INTRODUCTORY REMARKS.

THE rage of the age is concentration. Increase of population, decrease of calls for manual labour, changes in positions and pursuits, all these make this end of the nineteenth century a time remarkable in the history of this country, and, indeed, of the world.

Continental peoples have suffered largely through lack of those imperious characteristics that have made the English the first people of the world. These continental races, however, have done very much to compensate for this failing by bringing into existence vast systems of frugal living and every day economy, which, in their little cottages and upon their small patches of land, they have carried on to a perfection which has helped much in the hour of their nations' crises to preserve the national stamina, and also to produce a reactionary principle which has helped them as nations to recover rapidly from disaster and distress.

England has grown prosperous and populous, and while some other races are declining in numbers and in strength, the "Old Country" still holds her own, having weathered many storms, through which, like her "Hearts of Oak," she has ploughed to victory.

The English people, however, as they have engaged in commercial pursuits, have gathered the spoils, and learning, and inventions of most countries of the world, and have gradually collected, into their little sea-girt isle, machinery and methods which, as a result of their immense wealth, they have been able to afford better than any other nation, and which have served, in many instances, to give the English producer vast advantages over any others in the world.

While this has been going forward—while railways, like a vast network, have continued to cover the earth and link together distant points and almost unheard-of corners of the globe—in the country districts of England, where the sheep-bells, and yeoman, and all those glad sights of old English husbandry once adorned the countryside, a sleep of death has seemed gradually to steal over agricultural pursuits.

We here quote the description, of some districts he had visited, given by Professor Long, in a paper read before a meeting of the Farmers' Club

in London, upon the utilization of derelict land—in which he says, that in some districts, he found "as deplorable a panorama of an almost deserted country as could be found in agricultural Europe."

Of course, this condition of things must in the long run prove disastrous to the great army, the rank and file of which have inhabited country districts, and, in bygone days, contributed so largely to the wealth and resource of the nation.

In the report of the minority of the Royal Commission on Agriculture, these instructive lines occur in paragraph 3—"A third cause of difference has been the comparative absence of small farms in the east and south of England, as compared with other districts, excepting the south-east of Scotland. The evidence shows us that, as a general rule, the occupiers of small farms have weathered the trials of the last few years much better than those of large farms. They have not felt the same difficulties as to labour; they work their farms themselves, with the aid of their families; they pay more attention to the *smaller products of their farms*; they *devote themselves more to dairying* than to corn-growing."

The italics are mine. The Royal Commission on Agriculture not only shew the dark side of the picture, but they have in these words cast a ray of light over the darkness that should serve to

enlighten the English farmers, and show them where their sheet anchor lies.

Of course many reasons might be given, and many theories advanced, as to the influences which have so seriously undermined the agricultural pursuits of the country as to bring about this sad condition of things. First and foremost among the facts we have to consider is the enormously important one, that free trade, however it may have affected agriculture, has wrought stupendous reformation in the general condition of the country. It came, indeed, as "a breath of fresh air" to people who had been almost stifled amid the awful tyranny of monopoly, and as emancipation to many a poor slave of circumstance.

It must be remembered, therefore, that any recommendations that have for an element ideas of robbing the English people of the immense benefits of this memorable and English-like institution, would meet with strenuous opposition from the increasingly enlightened electorate of the country, who have learned by sweet experience to estimate and appreciate the advantages which have come to them as a result of its introduction.

No. Agriculture must alter, and be adapted to meet the requirements of the age, which can get cheap corn, but needs greater supplies of other commodities that might be produced upon the land,

Modern farming is all too full of elements that lack excellence. Our British farmers are one of the finest bodies of men in the world: men who possess undoubted abilities and strong minds. Because of this they have always been a little difficult to reach with anything like innovation or improvement.

One has only to read the history of George Stephenson's introduction of the locomotive, to see how, in his day, the farmers seemed almost to lead the van in persecution and opposition, and, indeed, in arousing the country to endeavour, as far as possible, to keep out the iron monster, as they regarded the railway engine.

A remarkable change, however, has come over our sturdy yeomen, and to-day it is not only possible to recommend, but also to induce farmers to put to the test ideas and theories which in the heyday of their prosperity would have been scouted and ignored.

I shall endeavour in the pages of this book to review the farmer's position, and to endeavour, as far as I am able, to suggest systems by which a great deal of ready money might be earned at little cost and outlay, which is the very thing farmers are needing most of all in these days of depression and difficulty.

Of course, the farmer's direct connection with the

land affords him opportunities that do not fall in the way of people living under different circumstances; but while farmers have been in difficulties, of course, labourers and tradesmen, and even landlords have suffered immensely as a consequence.

I desire to ask those who have passed under this cloud to follow me carefully for a little time, while I endeavour to show them how they too might fortify their position and add to their comfort.

To begin then with our farmer, with all his opportunities: let me suggest that in districts where a good deal of grass is grown, that part of the land that is devoted to stock raising should be given up entirely to poultry-keeping and dairy produce, as well as the cattle.

This might easily be managed, especially if the farmer has a family who would assist him in minor details of management, and give an eye to the whole department.

Many farmers' wives I have met have helped their husbands wonderfully by their efforts to produce poultry and eggs, and so gain a little extra ready money to help to meet perhaps ever increasing demands upon the exchequer. I have known in some districts which I have visited, small holders who have paid their rent, and some other expenses beside, out of the profits of their poultry,

leaving them free to work to better advantage in other branches of the industry.

We must never forget that upon a farm a good deal of grain, &c., necessarily is wasted, and not only this but an abundance of insect life is found, which would feed fowls and keep them in better health than anything beside. These advantages the farmer would get for nothing, and he should consider whether it would not be better worth his while to feed chickens upon this waste corn and insect life, than the sparrows, rooks, &c., that come for the waste corn and often carry away much other as well.

Then again, the labourer would find it a great boon if upon his patch of ground he kept some birds that would bring in a little when hard times or hard weather threw him out of work. His master would help him doubtless by letting him have some corn at the lowest possible price, and together they might form a self-help society that would serve to lessen anxiety and sweeten life.

The result of this would soon be apparent. If the labourer were able to live on when the hard weather stopped his work, the villages would retain within their parish borders many of those who now drift into our towns to suffer in destitution and despair, when they might have continued to inhabit the homes they should have been helped to

maintain in the fresh, pure air of the country side.

All these considerations are bound up in the farmer's position, and our politicians must always remember that the work of the legislature is to free from hindrance and afford opportunity for the display of ingenuity and energy for the common well-being.

Then the general well-being of the country very largely depends upon the profitable employment of every section of the community. England, as a country, cannot afford to ruin her agricultural industries, for among the more lucrative of her trades, farming produce forms an all important part, and it should be the endeavour of any man or woman of influence to help, as far as possible, to maintain in prosperity and vigour those undertakings which have for their object the strengthening of the agricultural position.

I have been greatly pleased as I have gone about among the farmers and cottagers of many counties, particularly in Lincolnshire, to observe the gradual growth of the interest which has caused these men, some of them, to break through their barrier of prejudice and turn their minds to real practical poultry-keeping.

What is needed in the poultry world to-day, is the work of master minds, grasping the real

significance of the situation, because it would be better to "take time by the forelock" and set to work, so as to reap the golden harvest that must be produced by an intelligent application of sound principles of management to the poultry-keeping of the future.

Then again, the ground would be helped greatly by keeping poultry upon it, so that the old principle of feeding sheep upon ground to manure it and give it a rest, might be carried still further by the turning in of poultry, that would eat up more of the insect life, and, perhaps, the waste corn, and so ensure the benefit to a fuller degree in many instances.

Some years ago I visited Northern France, and while there, I tried to find some of the great poultry producing farms, which many believe exist in that country. What was the result? I did not find that the poultry and eggs of France were produced upon large farms at all, but in cottagers' gardens, and upon small producers' land, the industry acting as an auxiliary to enterprise, by which other commodities were produced with the poultry and eggs upon the same land.

In Belgium, matters are very much the same, for the people of this most economical nation under the sun also keep fowls to add to their very scanty means of livelihood.

And these are the people that send us over most of the poultry and eggs for which the millions spent upon these commodities are paid out year after year.

What I want to bring about is the addition of a well-managed poultry-keeping department to every farm in our country, so that this most profitable industry might receive at the hands of our most intelligent farmers that attention and diligence of application which has made Englishmen succeed in so many walks of life in every part of the world.

Orpingtons of each of the varieties have found favour with farmers everywhere. When British farmers have live stock, they like good stock, and thus the fine massive Orpingtons have "taken their eye" and filled their egg basket at the same time.

Farmers complain very much of railway rates and other hindrances to success, but the whole system of farming needs revision, so that new and important additions may be made to ways and means that have hitherto been sufficient, so that the needs of the times may be met and satisfied, and peace and plenty still make the old homesteads of our country ring with the good cheer of the husbandman.

County Councils might do much to assist the introduction, into farmyards and labourers' runs, of

birds of good breed suitable for the purpose, if together with the lectures they have provided for many country districts, they used their influence to procure grants of money to supply small holders with good stock to commence with, so that every opportunity might be given for such persons to commence well, and lay a good foundation for future success.

Ratepayers, everywhere, should use their influence to induce Parish Councils to take up these most important matters, as village life would become increasingly popular if good advantages were secured in this direction.

Fanciers, of course, have passed their verdict upon Orpingtons, and pronounce them most excellent. They are birds for the times, because many of the failings, which the old breeds shewed, are absent in these massive, active birds, that are handsome and hardy, profitable and productive of great and lasting improvement among the already existing fowls wherever a cockerel of the breed has been introduced; and while many breeds have done excellent service in this respect, such as Houdans, Langshans, Wyandottes, and Plymouth Rocks, yet no breed has seemed to acquit itself so much to the satisfaction of the British Farmers, who have tried them, as the Orpingtons, that have seemed, in so short a time, to have taken the premier position as farmers' fowls.

In the show pen, competition has not yet spoiled Orpingtons, and I trust the day will never come when the good qualities of this noble breed will have degenerated and deteriorated in the scuffle after a few fancy points, upon which judges adjudicate and award prizes.

I shall endeavour, in this book, to answer many objections that have been raised by poultry-keepers of the old school, and to prove the position the Orpington holds as head of the poultry yard for general purposes, to be justified by results, and upheld by the practical outcome of many experiments tried, out of which the birds have come with flying colours, covered with glory.

What the future of England will be is yet to be seen, but whatever she may grow into, none can deny that, at the present day, her destinies hang in a balance which is not the balance of power, not the balance of dignity, not the balance of pre-eminence, all these she has. What England wants to-day is *industry*, that plodding industry which shall fill up, in detail, the vast framework formed by our forefathers, and still growing—like the coral reefs grow—unseen under the tide of her commercial supremacy, so that the Empire of our Queen Empress, upon which the sun never goes down, may hold still that pre-eminent position among the nations of the earth, a position that shall justify

more and more the high dignity of the people of this little isle, the supremacy of whose sovereign rests, as its borders are secure,

> "Broad-based upon her people's will,
> And compass'd by the inviolate sea."

THE POULTRY WORLD AND ITS NECESSITIES.

Needs—Hindrances—Ignorance makes action fatal—Crossing Nature's own remedy for deterioration—Natural selection *versus* Artificial selection.

FOR many years I have made it my great aim in life to study the problems connected with poultry keeping under all circumstances. Complex and difficult as the subject has always been, yet there is about the matter so much that calls for investigation and claims the interest of intelligent minds, that constantly, almost unceasingly, I have been enabled to maintain a lively interest in the subject, and hold intercourse with the poultry keepers of England in their homes and yards, and through the poultry press, to which I have contributed from the very commencement.

As I have dived deeper and deeper into the great facts connected with the industry, several leading ideas have always seemed to stand out as pre-eminently important with regard to all the concerns

of poultry keepers and their feathered charges. The first is, always to remember that live stock needs constant attention; another is that the health of fowls varies as their conditions of life make them quite healthy or the reverse; and the third has been my watchword ever—that under favourable circumstances and judicious management, poultry *will* pay. Of course, in order to prove that what I write concerning these things is true, it is important that I should shew what favourable conditions for poultry-keeping really consist of. Here then I will draw the attention of my readers to the all important question of breeds. Of course, very much depends upon what kind of fowls are kept, as bad birds eat oftentimes more than good ones, especially if they are diseased, and so are really more expensive to maintain in a fat, lazy condition than those birds that are fulfilling their mission by laying and putting on flesh.

I have found a strange inclination in people that I have met to regard the poultry-keeping industry as a thing not worthy of that close attention which must be paid to the details if anything like financial success is to be obtained.

In the early days when the Black Orpingtons were introduced, I was continually annoyed by learning of the doings of people who bought up any black fowls and sold them as Black Orpingtons.

Many people were deceived, and thinking real Orpingtons were the cause of their failure bemoaned their loss and ran down the breed.

The days are fast coming however when poultry-keepers will, if they are to succeed, find it perfectly necessary to study minutely many problems which to-day are ignored or believed in by very few.

As I have gone about, I have noticed that what people really require in connexion with poultry-keeping is to be shown just how they may make a good start at little expense, and gain profit almost at once.

The fowls of the future must possess excellences of such a kind as shall render them strong enough to stand cold and changes which are at the source of many of the diseases affecting poultry.

The poultry world may be said to consist of all those undertakings which have been started as the outcome of a dawning enthusiasm, produced by the constantly flowing stream of information, which week after week, year in and year out, is sent forth from the poultry press on its mission of moulding public opinion and reforming the old worn-out theories of the past, and placing the fancy upon a broader and more secure basis of excellence and carefulness.

I have always made it a prominent feature of my work in poultry circles to emphasize the fact that

every other consideration should be sacrificed to utility and profitable management.

I have every sympathy with those who constantly and consistently study the interests of one breed, but if true success is to be obtained, a more comprehensive policy must be pursued, and from the wide range of possible aids to poultry-keeping, and the long list of useful breeds, careful selection should be made, and each detail of circumstance met and dealt with as occasion offers.

When I commenced poultry-keeping, many years ago, I was struck, almost at once, by the great waste of time and energy which the old barn door fowls caused. Of course it was not then a popular theory that poultry would pay, and people had settled down under the delusion, and never endeavoured in any way to turn their efforts into financial success. Bad management was the first cause of this condition of things, and fowls became unimportant things in the estimation of most people, being treated pretty much like and thought as little of as the rooks and starlings and other wild birds of our fields and woods.

The fowls of the back-yards were poor, thin, weakly birds, infested with vermin, which often divested them of feathers in many parts, so that their pitiable appearance was not a good recommendation for aspiring enthusiasts to pursue poultry-keeping.

A few old breeders kept good birds. These, however, were bred just for type, and scarcely ever with due regard for utility, until the birds which won in the show pen were—as indeed they have been all too sadly often since—just the very worst of layers, and sometimes the worst of table birds.

The apathy and bad management of the owners, and sad condition of the fowls, of course, made eggs very scarce, and the old breeders were always very careful to keep their best birds to themselves, so that it was difficult for anyone who would have been willing to breed good birds to get any stock or eggs. Of course many of these hindrances to the spread of the industry have gradually been overcome, and the door has been thrown open for the entrance of any who care to bring intelligence and application to bear upon the subject, and so to grasp the opportunities offered as to work on to success.

We will now turn from our glimpse of the old dark past, and the dawning of better days, to consider the present position of poultry-keepers with regard to the poultry-keeping of to-day. The new poultry keeper of the present starts under circumstances of the greatest advantage, surrounded as he is with good poultry literature, and sound, practical advice.

Of course, it is highly important that a certain knowledge of the subject should be possessed by

all who venture time and money in poultry pursuits, so that by careful and judicious management they may make the best of their opportunities and work on successfully.

It is of little use ignorant persons starting poultry farming, and fancying anybody can keep fowls, as this policy generally ends in failure and brings people to despair.

There is no excuse for ignorance with regard to poultry matters at the present time, because good, sound advice is spread about very freely, and I am glad to say that the old selfish breeders, who kept the best of everything to themselves, have passed away, and a new race of more generous men and women have stepped into the places they once held in the poultry world. I am glad to find also that the influence of good practical information, in the dissemination of which I have played a not unimportant part, is telling on the side of progress and excellence, so that many sad experiences of the past are not likely to be repeated unless under circumstances of the grossest carelessness.

And now I will turn for a little time to consider the great principle upon which much of the future of profitable poultry-keeping depends, viz.: the principle of crossing for the production of breeds which combine in one bird excellences that existed separately as characteristics in two or three

separate breeds. It is a fact, well-known to naturalists, that the instinct of birds or animals invariably leads them to mate in the breeding season with other birds or animals that belong to a different flock or family to that of which they form part. Fresh blood thus introduced has a wonderful effect upon the offspring, and strength of constitution and stamina can only be maintained by this means wherever animals or birds are bred.

It has been a question much disputed between scientists as to whether all the breeds of fowls in existence really emanated from a single pair of parent birds. Around this point warfare scientific has raged, the same ideas as those I have had to deal with in my controversy, as to the distinctness of the Orpington breed, seeming to have so laid hold upon the minds of breeders and naturalists of the old school, that with their stunted ideas and lack of that knowledge, which can only be gained by real experiment, they seemed to feel that they formed the only reasonable hypothesis upon which to build. Nature, however, is not so utterly mysterious, and I could shew by many things I myself have observed that Mr. Darwin's contention that it was quite possible for all the varieties of fowls to have sprung originally from a single parent pair, was, at least, the idea best supported by the

significance of facts that might now be observed. As a matter of fact very grave doubts exist as to what region many of our breeds of poultry really originated from. The great mind of Darwin seemed to have fathomed the shallows of the distinct species clique when he wrote as follows in his "Animals and Plants under Domestication":—

"Most fanciers believe that they are descended from several primitive stocks * * * * Most naturalists, with the exception of a few, such as Temminck, believe that all the breeds have proceeded from a single species, but authority on such a point goes for little. Fanciers look to all parts of the world as the possible sources of their unknown stocks, thus ignoring the laws of geographical distribution. They know well that the several kinds breed truly even in colour. They assert, but as we shall see on very weak grounds, that most of the breeds are extremely ancient. They are strongly impressed with the great difference between the chief kinds, and they ask with force, can differences in climate, food, or treatment have produced birds so different as the black stately Spanish, the diminutive elegant Bantam, the heavy Cochin, with its many peculiarities, and the Polish fowl, with its great top knot and protuberant skull?

"But fanciers, whilst admitting and even over-rating the effects of crossing the various breeds do not

sufficiently regard the probability of the occasional birth during the course of centuries of birds with abnormal and hereditary peculiarities; they overlook the effects of correlation of growth—of the long continued use and disuse of parts, and of some direct result from changed food and climate, though on this latter head I have found no sufficient evidence, and lastly, they all, as far as I know, entirely overlook the all important subject of unconscious or unmethodical selection, though they are well aware that their birds differ individually and that by selecting the best birds for a few generations they can improve their stocks."

So the mighty evolutionist sweeps on one side in his own majestic manner many of the baseless theories that so torment short-sighted breeders of the old school, and maintains the theory I have held and demonstrated so completely by producing the Orpington fowl, that it is possible still by following the law that has made the old breeds, so to mate birds as to produce (albeit, perhaps, all too rapidly for the proper development of some things), new and even better breeds for the future—breeds that shall transcend in usefulness the old, while retaining all the most helpful characteristics that have made these famous in the past.

So much then for the scientific foundation of the principle, now I will endeavour to show some of

the advantages gained by the introduction of breeds that are produced by the amalgamation of several varieties. First of all, the wonderful energy these birds possess in comparison with the birds of older breeds marks them out at once. In my early lectures on Poultry-keeping, I well remember how I endeavoured to emphasize the necessity for active, energetic birds, telling my audiences that I often felt inclined to drive my Cochins and Brahmas round with a stick, for they seemed often so lazy that they would scarcely take enough exercise to keep them in health. Since then I have learned more fully the great value of scratching exercise for fowls if they are to lay as they should, and, indeed, one of the great secrets of selection for mating by the outward appearance of fowls' heads, has grown into a fully accepted principle of economical poultry management, and is now studied by many who make poultry pay. Then birds from these newly made breeds are generally remarkable layers. Why is this? The answer is not far to seek. Leaving the benefits accruing from the cross itself, which are not insignificant, I might notice how that in the making of the breeds there will most probably be infused into the final development of the bird, blood of some breed that possesses these characteristics, and so the cross with such a variety sets its seal upon the birds and makes itself manifest

in such beneficial results. The great question seems to hinge upon how far results have shown that such breeds have grown valuable and useful.

I fearlessly assert that so far as I can judge the only difference in real and lasting significance between an old breed like the Dorking, and a new breed like the Orpington, is that in the former the characteristics have become more settled by long usage, and that their extraction is obscure, while with our new breeds we know where they came from, and better still what we are able to do with them. An air of mystery lends a charm to things in some people's estimation, but I confess to no such sentiment, and with science and experience to lead me, I can but stand or fall upon the facts I have proved absolute, and upon birds, which in obedience to the ruling of these principles, I have given to the world. There is no doubt in my mind that both in the making of breeds, and the formation of stocks of birds, &c., crossing is Nature's own great preventive of rapid or marked deterioration—the great saving clause of animal life.

And now I turn to another phase of the foundation question of the formation of breeds, to consider the value of that selection, which, through instinct, Nature brings about, as compared with the artificial selection, which is the foundation

of the bringing out of such breeds as the Orpington. It may be an open question, in some people's minds, as to whether it is right to so far assist Nature as to bring about, by artificial means, that which would take, perhaps, years to produce by natural sequence. Of course this is not a question that would cause me a moment's anxiety, because I am fully convinced that man's work in the universe is to govern, and be blessed in the use of gifts of all kinds, which are all means to a great end, and which have been given for the purpose of aiding and encouraging him to excel in pursuits that have for their object the increase of his well-being and prosperity. The work of breeding fowls by means of artificial or over-ruled selection is one practised even among savage races.

Mr. Darwin notes the following extract from Ferguson's "Illustrated Series of Rare Prize Poultry," 1854. "The fact that poultry have, until lately, received but little attention at the hands of the fancier, and been entirely confined to the domains of the producer for the market, would alone suggest the improbability of that constant and unremitting attention having been observed in breeding, which is requisite to consummating in the offspring of any two birds, to transmittable forms, not exhibited by the parents."

Of course, carelessness is indeed a powerful factor

in reducing breeds to worthlessness, but this is not all, and Mr. Darwin, in commenting, writes as follows :—

"This at first sight appears true, but in a future chapter on selection, abundant facts will be given, showing not only that careful breeding, but that actual selection was practised during ancient periods, and by barely civilised races of men. In the case of the fowl, I can adduce no direct facts showing that selection was anciently practised, but the Romans, at the commencement of the Christian era, kept six or seven breeds. Columella particularly recommends as the best, those sorts that have five toes and white ears. In the fifteenth century, several breeds were known and described in Europe; and in China at nearly the same period seven kinds were named. A more striking case is that at present in one of the Philippine Islands, the semi-barbarous inhabitants have distinct names for no less than nine sub-breeds of the game fowl. Azara, who wrote towards the close of the last century, states that in the interior parts of South America, where I should not have expected that the least care would have been taken of poultry, a black-skinned and black-boned breed is kept, from being considered fertile and its flesh good for sick persons. Now everyone who has kept poultry knows how impossible it is to keep

several breeds distinct unless the utmost care be taken in separating the sexes. Will it then be pretended that those persons, who in ancient times, and in semi-civilized countries, took pains to keep the breeds distinct, and who, therefore, valued them, would not occasionally have destroyed inferior birds, and occasionally have preserved their best birds? This is all that is required.

"It is not pretended that anyone in ancient times intended to form a new breed, or to modify an old breed according to some ideal standard of excellence. He who cared for poultry would merely wish to obtain, and afterwards to rear the best birds which he could; but this occasional preservation of the best birds would, in the course of time, modify the breed, as surely, but by no means as rapidly as does methodical selection at the present day.

"If one person out of a hundred, or out of a thousand, attended to the breeding of his birds this would be sufficient, for the birds thus tended would soon become superior to others, and would form a new strain; and this strain would, as explained in the last chapter, slowly have its characteristic differences augmented, and at last be converted into a new sub-breed or breed. But breeds would often be for a time neglected, and would deteriorate; they would, however, partially retain their character, and afterwards might again

come into fashion, and be raised to a standard of perfection, higher than their former standard, as has actually occurred quite recently with Polish fowls. If, however, a breed were utterly neglected, it would become extinct, as has recently happened with one of the Polish sub-breeds.

"Whenever in the course of past centuries a bird appeared with some slight abnormal structure, such as with a lark-like crest on its head, it would probably often have been preserved from that love of novelty which leads some persons in England to keep rumpless fowls, and others in India to keep frizzled fowls. And after a time any such abnormal appearance would be carefully preserved from being esteemed a sign of the purity and excellence of the breed. From this principle the Romans, eighteen centuries ago, valued the fifth toe and the white ear-lobe in their fowls. Thus, from the occasional appearance of abnormal characters, though, at first, only slight in degree; from the effects of the use and disuse of parts, possibly from the direct effects of changed climate and food; correlation of growth; from occasional reversions to old and long lost characters; from the crossing of breeds, when more than one has been formed; but, above all, from unconscious selection carried on during many generations, there is no insuperable difficulty to the best of my judgment, in believing that all the

breeds have descended from some one parent source."

I quote thus at length to shew that the principle upon which I worked to introduce my Orpingtons was no new or infantile idea, but one well founded in fact, and honoured for centuries.

I realise increasingly the difficulties that arise when new breeds are formed, but I have also found that by careful and judicious selection from among birds produced from unrelated pens, even the very defects may be bred out as the rapid development of my Orpingtons has abundantly shown. I have entered into this consideration of facts as given by one of the scientists of the century, to shew that when old and well-known, but scarcely well-informed breeders, called Orpingtons mongrels, they only by their very arguments confessed their utter ignorance of the elementary laws of breed production. I would recommend poultry fanciers who care to pursue this subject, to read Mr. Darwin's clear, terse, and valuable remarks *in extenso*, and to learn, as I have learned, that in this nineteenth century march towards excellence among the breeds that adorn our poultry yards, we have science and Nature on our side, and, so ultimately, these grand birds must work their wonderful results in producing vast reformation in poultry-keeping methods and results.

In the chapters which contain the particulars of the original formation of the breed, I shall hope to shew by actual facts how unconsciously at that time I followed out the ideas of Mr. Darwin in utilising "sports" and "wastrels" in forming the Orpington, for I had six distinct varieties before I even knew of his book.

Of course poultry-keeping has advanced much since Mr. Darwin wrote his memorable books, but it has *advanced to prove his theories true*, and will still further develop—as it itself developes the principles he so carefully sought out and gave as facts to the scientific world.

THE AUTHOR'S CHARACTERISTIC THEORIES.

Excellence—Profit for pains—Waste, want, worry—Colour of Eggs—Langshans, their great virtues and failings—American breeds—French and foreign imports and home industries.

NEVER, perhaps, in the whole history of the English nation has there existed such a need for close application to economy of every kind as that which colours and in very much governs the circumstances of the latter stage of the nineteenth century. As soon as I began to study the question of profitable poultry-keeping, I was astonished, as I discovered, one by one, the grand possibilities that lay within the grasp of enterprising men and women who would take advantage of opportunity thus given them and embark in a thorough undertaking of the industry for financial success. One condition, however, I found governed all the rest, and that was, if poultry were to be made profitable only good birds must be kept.

Of course, in all live stock, a great amount of variation exists as to characteristics and propensities, the influence of which tends to make it an open question as to which breeds, and indeed, which individual birds of a breed are likely to fulfil the expectations of the poultry-keeper under given circumstances. It became, however, a point of strong interest with me as to whether it would not be possible to produce birds that would combine the various characteristics of the best of the varieties and so form a breed of universal excellence.

I therefore set to work, and by careful and judicious breeding, I was able, in a few years, to give to the poultry-keeping world a breed, which, for egg production and table, has been accepted all over the world as the grandest production of the poultry yard.

I would turn aside here for a moment to consider just what real excellence in a fowl consists of. Wild birds live, and the most they offer is, perhaps, a meal for the sportsman or his friends, but with domestic poultry the case is very different. The demands of market and home are such that plenty of new laid eggs and a good supply of table poultry are not only needs which are felt in higher circles of society but among our honourable mechanics, and even by the lower classes these

articles of food are consumed in ever increasing quantities. The breed then that produces the best results, both as regards eggs and birds for the table, at the least possible cost for food and management, may truly be called the best all-round breed for general purposes. The question very naturally arose as to whether this much-to-be-desired breed could be produced, and I answered the question, not by theories, not by suggestions, but by Orpingtons.

The idea of profit in connection with poultry-keeping was not a prominent feature of the old school management, consequently the development that has since been so marked a feature of the revolution that has set in during the last 20 years, is, of course, the result of a more energetic and methodical policy, the influences of which have been brought to bear upon the financial considerations of the question.

The old breeders loved good birds, but the old proverb, "Handsome is as handsome does" scarcely entered into their minds at all until I happened to see a most remarkable pamphlet which promised most wonderful results—some altogether out of the question—which might be gained by keeping a few fowls.

I sat down to contradict the theories this pamphlet set forth, and while I considered facts

I had gathered through long years of observation, the main point seized hold upon me, and I saw that although it would be unreasonable to hope for as much profit as the writer of the pamphlet promised, yet I could see how, by careful and judicious management, poultry might be made to pay.

My first edition of "The Poultry Breeder and Feeder, or, How to Make Poultry Pay," was the outcome of my consideration of the subject, and the watchword of my life ever since, in all sorts of circumstances and in all parts of the country, has been "How to make poultry pay."

I have reserved for another chapter many subsequent events that are interesting, and pass on now to shew what have been the results of my careful investigation and industrious spreading abroad of my theories.

In my "Poultry Journal" I am constantly publishing Balance Sheets forwarded to me for publication, by poultry-keepers who have succeeded through following my advice and founding their management upon methods I have recommended. I received from a man in Staffordshire, in October, 1893, a balance sheet which shews that he started in 1891, with stock valued at £5 17s. 6d. At the end of the first year his profits from these birds amounted to £10 19s. 3½d., and

after paying for food and eggs for sitting in 1892, his balance sheet showed a clear profit of £15 18s. 8½d. although his stock was still valued at £5 17s. 6d. at the end of the second year. These birds were only kept in a small back yard, and from cross-bred birds of several of the best varieties, including Orpington-Leghorn cross-birds, he was able to gather as many eggs in the winter as neighbours who kept five times the number of birds under the old conditions.

I could give hundreds of these balance sheets, which all tell the same tale, more or less, and that is that where soft food is given the birds in the morning and good sound grain at night, with a sufficiency of good sharp grit and green food, and where, for roosting and shelter, nice water-tight, but well ventilated houses are provided, birds of good and profitable breeds will pay and pay well.

Of course, the same general laws govern success or failure in poultry-keeping as are the governing principles of nearly every calling in life.

One of the great hindrances to success with many people is the tendency to muddle and waste, and negligence with regard to little things, which are all important to comfort; and comfort means health, and health means good results where live stock is kept.

I am continually receiving letters from disappointed poultry-keepers, asking me for advice concerning the health of their birds. I have sometimes, in the course of my professional visits, had the painful duty of pointing out the condition of fowl houses, and indeed birds themselves that have been infested with vermin; while feeding, instead of the methodical careful dealing out of good nutritious food, which is likely to yield a return of eggs and poultry fit for table, has been just a throwing down of any quantity of corn, of perhaps the worst kinds, just when the fancy seized the poultry keeper to do so. Then again great waste is occasioned through keeping bad, lazy, unproductive fowls, that eat a great deal more food than good ones and yield no return.

On the other hand, good fowls are sometimes over fed, and becoming fat are unable through this to produce eggs as they should, and so in response to efforts made by owners, who feed more, thinking the birds need a greater supply of food, difficulties increase and bad matters grow worse, as the fowls grow fatter and fatter and less able each day to produce eggs.

People turn round at once and say, poultry will not pay. I confess that they are not likely to pay under these conditions, nor would anything be a success if neglect and mis-manage-

ment were allowed to play havoc with every chance of success.

It is always sad to hear the moan of incompetency. There is no more pathetic picture in this world than the sight of a man or woman who through incompetency fails, and then grumbles at everything and everybody but their own bungling selves. It has only been quite a natural consequence of the interest that has been aroused in poultry-keeping, that many shallow-minded people have attempted in their slip-shod superficial way to gain success in a pursuit which depends for its very life upon the careful management and diligent attention to little things which make or mar their prospects.

Unfortunately, many persons advocate the launching forth of totally unexperienced persons into poultry farming, especially where these poor misled people have a little money. The result has been, in many cases, that these enthusiasts have lost their money and then turn into those individuals that send balance sheets and letters to the papers, which so far from proving that poultry-keeping will not pay, just reveal to the readers the personal unfitness of these people who say the grapes are sour, because, like the fox in the old fable, they have "jumped" at things and found that poultry-keeping was a failure when worked upon such lines.

I have been very very sorry as I have read the doleful accounts of failure that have appeared sometimes in the poultry papers, and in no single instance have I seen any point raised that might not easily be explained by anyone who really understood the subject well enough, and that would read between the lines the real cause of failure.

Ignorance, therefore, has brought want, and want naturally causes worry, so that instead of intelligence bringing success and happiness, ignorance has brought into such lives lasting discomfort. I would just at this point appeal to people who feel that poultry-keeping is not a lucrative thing to just let me know their feeling upon the subject, and come and look round my pens, where I shall be able to shew them from four to six thousand, and at some seasons of the year considerably more good birds—we turn out the bad layers and keep only the good—that would prove profitable to them if they managed them as they should, these being kept upon the farm where I live at St. Mary Cray.

A subject that has been of great importance in bygone marketing days is the colour of the eggs. In some districts brown or tinted eggs will sell better by far than white ones, although the colour of the shell is not always a sign, as many fancy it is, of a richer inside. White eggs generally are laid by non-sitting breeds, and a white shell generally

indicates a greater proportion of albumen or white to yolk. This is the rule, which like every other is proved by several exceptions. But although this is so, yet it is a fact that in some parts of England, one or two more eggs have to be given for a shilling when the shells are white than are usually sold for the same amount when the shells are brown or tinted.

When I made my Orpingtons I bore this in mind, consequently even this colouring of eggs is an accomplished fact in these birds that are so fitted for pleasing and satisfying the demands of the customers poultry people have to deal with. Of course the Langshan and Plymouth Rock both laid beautiful brown eggs, and naturally the Orpingtons had this bred into them from these sources, and have kept it through the final developments of the breed. All poultry-keepers who require eggs for market should bear this in mind, as oftentimes a customer is secured and retained by the brown eggs that some people are so fond of.

I turn now to consider that noble breed which may be looked upon as the foundation of my Black Orpingtons. Langshans came originally from China. Major Croad introduced some specimens at the Crystal Palace Show of 1872. A great discussion arose as to the distinctness of the breed, some fanciers of the day determining that they were

Black Cochins, while others agreed they were a distinct variety. It matters very little which of these theories is really the correct one. The Langshans are a splendid breed and first-class layers of rich brown eggs, and I have had them lay right through the severe weather, and also when almost bereft of feathers through moulting, so full of good, substantial characteristics do they seem to be.

One point, however, seemed always against them, and that was the feathers on the legs. Neither graceful nor elegant, and for many reasons undesirable, these inelegant appendages had to be dispensed with, and in the Orpington, with its many other excellent features, these feathers are missing causing these fine massive birds to look neater, obviating many possibilities of disease of the feet and legs, caused by the dirt which so often collects upon the feathers when the birds are subjected to the conditions under which poultry is sometimes kept, such as scaly legs, and other forms of excrescence, and in some cases in the second year diseased feathers, especially in the cock birds.

The poultry world was awakened to new interest when new breeds began to arrive from America. The plucky little White Leghorns led the van, after which "Brother Jonathan" sent over also Brown Leghorns, which have been developed into Buff Leghorns, Black Leghorns, Pile Leghorns, Duck-

wing Leghorns, all good, more or less, owing to their connection with some parent stock of healthy, hardy, inveterate layers that had transmitted this propensity in a marked degree in the case of all these new, and in many respects, excellent breeds.

After these, Plymouth Rocks might be mentioned. Bigger birds with speckled plumage, an upright carriage, and good laying and table qualities, which have made them deservedly popular, and much esteemed by all who have given them a fair trial. The old Dominiques had given way for this grand variety, and were, so to speak, swallowed up in the novelty of the entirely new name, and introduction of the Plymouth Rocks.

These new breeds were well received and in the old country have grown popular, doing much to revive worn out breeds in England. I have always made the American breeds my peculiar study, because it has always seemed to me that their introduction into this country was the real cause of so much interest being aroused with regard to profitable poultry keeping, and so when Wyandottes, both the silver and golden varieties, and later the white and buff were introduced, I hailed them with delight because I could mark in the birds a distinct advance which was on the side of progress.

The effect of the introduction of these breeds, however, has been distinctly on the side of laying qualities. The Plymouth Rocks were the best of the table birds as well as the Wyandottes, but taking the American breeds as a class they are decidedly small, except in the case of those I have mentioned.

These new breeds, therefore, only partially fulfil the great mission of new breeds to the poultry world, as table qualities, which in England had been a point always, owing to the splendid old Dorkings and the French breeds, so excellent in their way, having been sold in large quantities, were altogether too important to be overlooked in this way.

So taking a wide view of the subject, and marking what was really necessary, I set myself to work to produce the Orpingtons, which have combined grand laying results with fine table qualities, and so, although the work is far from being perfect, the die of the future is undoubtedly cast in this noble breed, which produces birds that may really be called, when all things are considered, fowls for the times.

In another place, it will be seen what part some of the new American breeds have played in the formation of my varieties of Orpingtons, and I trust my American readers will appreciate the tribute

of respect to their enterprise and judgment which I have paid them, by introducing in the old country a breed which combined the excellences of the best of their new breeds with the best features of many of the old and more honoured of our English fowls, just as they have given their heiresses to English nobles to adorn the homes of those who inhabit the stately halls of England.

Of course the great aim of the men of "The Forward Movement" in poultry-keeping has been to compete successfully with the continental importer that floods our markets with produce and pockets the money.

I have taken from the 1894 Blue Book on the trades of the United Kingdom, etc., a few figures which are not uninteresting to poultry keepers of all classes who have the welfare of their country at heart. During 1894 for eggs alone £3,687,069 was paid to foreign countries, while our British possessions sent us £3,786,329 worth of eggs, making a total of £7,473,398 that was paid out of the pockets of English people for eggs alone.

When we add to this £479,737 that was paid for poultry and game to foreign countries, and £1,147 for the same produce to British possessions, we see what an amount of money is spent annually upon eggs, poultry, and game in this England of ours.

When we consider also how many birds and eggs are produced in England itself, not to speak of Ireland, we can see what an enormous amount is lost to England simply because her people are not poultry keepers.

Some of the more detailed summaries are very instructive, Belgium sent us during 1890, £585,032 worth of eggs; in 1891, £540,699; in 1892, £629,264; in 1893, £682,636, and in 1894, £885,136.

France sent us during 1890, £1,270,092 worth of eggs, £180,820 worth of poultry and game; in 1891, £1,259,009 worth of eggs, and £160,064 worth of poultry and game; 1892, £1,437,203 worth of eggs, and £233,538 worth of poultry and game; in 1893, £1,611,495 worth of eggs, and £300,037 worth of poultry and game; while in 1894, £982,800 worth of eggs, and £222,909 worth of poultry and game.

Farmers should turn their attention more than they have done in the past to the rearing of turkeys, as these are imported by thousands into England, especially at certain seasons of the year.

No birds pay better for killing purposes, if properly managed, not even smaller fowls. The great point, of course, is to secure good stock, because size is everything, and if this is to be ensured, good big birds are required to breed from.

The great aim in good management ought to be to keep fowls for eggs, and turkeys for killing, as young turkeys fetch 9d. per lb. at least live weight, and 10d., 11d., and 1s. where the birds are of good size, say from 12 to 14 lb. in a hen, or a cockbird from 17 to 22 lb.

The prices of pork have been all too low recently to make it of any very great advantage for farmers to keep pigs, 6½d. per lb., and 4½d. per lb. in some instances for pork, being the most that could be made. Of course, foreign competition has a tendency to cheapen, but good English produce always fetches the best prices, especially poultry and eggs. With regard to these, the foreigner is far behind in prices obtained, and as for quality, this is not to be compared with that of the home produce, so that with opportunities of getting the poultry, etc., into the markets fresh, the English producer should be well able to combat successfully the foreign competitor for the vast sums paid out for poultry and eggs.

At Christmas, when vast numbers of turkeys and geese are sent into our markets, foreign produce always fetches worse prices than English ; about 7d. to 10d. per lb., perhaps being the average, while good English birds will fetch 9d. to 1s. 3d.

I was in one of the midland counties a few days before Christmas 1895, and I saw 1,100

foreign turkeys consigned to one firm alone in a large provincial town, and I ascertained that this shopkeeper had, out of 1,200 turkeys that were for sale, only 75 English birds to send to the more particular of his customers. This, of course, serves to shew what trade poultry rearers might secure, if only the produce were forthcoming at the proper season.

The great question then of the hour, especially for agriculturists to consider, is the vital principle by which this great outflow of the wealth of England is to be "turned again" into the bosom of the Mother Country.

Of course, poultry keeping is only a branch of the great whole, and doubtless if the prospects of the agriculturist were to improve, kindred industries that are in some sense allied to it, through direct connection with the land, would improve also.

What I want most of all to impress upon the minds of my fellow countrymen is this great fact, that the poultry keeping industry, while it fits in well with many other details of farm and rural life, produces a return at Christmas, or during those inclement seasons of the year when the land is fast locked in the grasp of the ice king, and not workable nor profitable because of the winter.

Indomitable perseverance is, after all, the great quality that has made the English race the finest

under the sun, and if we analyze, carefully, the elements that have been most conducive to the cultivation of this great and always powerful characteristic, we find that, because the peoples of the Northern counties of England, and the hilly, sparsely populated tracts of North Britain, even away to the stormswept Orkneys and Shetlands, are filled with vigour and stability, the farther North we go, the more of perseverance we find. Here, among the coalfields of the North, was the birth-place of Stephenson, that formed the mighty conception that has cast over the known world the network of silvern railway communication, which has been now for so long the very heart-throb that has moved into circulation peoples and wealth and commercial securities that have carried in their train untold blessings to humanity.

Here, among the weavers of the far North, David Livingstone was born, the man who penetrated the mighty African continent and did much to begin to flood it with civilization and God.

Here, Robert Moffat, the Apostle of the Bechuanas, learned to love his Bible, to revere his mother, and soon after to give his all to God.

Here, John Bright, the "Tribune of the People," the man of liberty and right, learned to persevere and to cultivate those sterling qualities which were everything to him and the cause he

advocated, as he afterwards carried his righteous ideas on to victory and blessing.

Yes, and many more names of noble men and women might be enumerated, all representing vast conceptions and sometimes unique commercial enterprises, such as Titus Salt, the merchant philanthropist; Tangye, the engineer; and many more of England's mighty sons, that have laboured for the weal of the people and have in peaceful revolution warded off a more terrible revulsion of feeling.

Here, in his humble Cumberland home, George Moore, "The Napoleon of Watling Street," first learned from his good father the sound moral principles that guided him to success and eminence in after life.

The great crises that have made the vast opportunities which these men have grasped and which have enabled them to do so successfully, have generally been times of depression or disaster. It seems to me, therefore, that the present agricultural depression may be one of those times when the national alarm shall make it possible to reform systems, and thus render the land profitable, free trade and all.

Of course, if this is to be done the farmers must co-operate willingly, and bring the weight of accumulated wisdom to bear upon the stupendous

problems, which must be solved patiently, dispassionately, and with that carefulness and wisdom that subjects of such vital importance demand, and I know of no class so well fitted to undertake this great work as the matter-of-fact honest men that I meet continually in the Northern Counties, where on their scattered farms they work wonders of agricultural skill and enterprise.

To review the commercial industries of England in a book like this would, of course, be superfluous, but it must always be borne in mind that England is wealthy, and that if in the new order of things capital or monetary help is ever required, it should be the business of the Government of the day to assist, as far as possible, the development of any such beneficial arrangements. Mr. Chamberlain's social programme seems to contain elements of usefulness, which will, doubtless, be infused into the life of the nation, for what English farmers and commercial men want most of all to-day is help to steady their tottering finance, and hope to strengthen their perceptive faculties, so that they may lend a ready ear to suggestions for improvement, which would fall differently upon their understandings if they had heard the jingle of the much needed money, the want of which perhaps had been the obstacle to such improvements being carried out before.

I would urge upon the attention of agriculturists everywhere the very valuable suggestions of Lord Winchilsea, who is, through the "Cable," advocating a system of depôt and centralization which would form a much needed mode of transit for produce from the point of production to the centre or distribution and sale.

It would be well if poultry keepers, and especially our farmer friends who have taken up poultry keeping, would co-operate with the noble lord in this direction, as this has been one of the greatest drawbacks to the spread of the beneficial system of poultry keeping in districts where railways are only few and far between.

The question of light railways will of course raise many considerations with regard to this transit part of the problem, and I am hoping for great things when some of those scattered villages in Lincolnshire, &c., in which I have been lecturing, shall have been brought into touch with some great centre by railways of this kind, so that the poultry runs, and the egg and produce market might be in constant touch, to the oft recurring benefit of both producer and salesman, as well as affording the producer a better opportunity of sending in his produce fresh into the market.

So much then for transit. Now let us look for a little time at the proportion poultry keeping should

bear to the whole of the farm. The number of birds kept will be governed principally by the amount of space at command, and in some instances by the skill shewn in management.

A sufficient number of birds should be kept on every farm to utilise a great portion, at least, of the waste corn. These might be allowed to run about pretty much where they please, and should, as a rule, be good cross-bred birds, as these are hardy and would grow, if from properly selected stock, into splendid table birds.

Then a number of birds of better or pure sorts might be penned in the orchards under the fruit trees, taking up their abode there, after sheep or other animals that will have cropped off the long grass have fed, and thus made it fit for them to run in. Before turning the chickens in it would be well to roll the grass down, as this tightens the the bottom and keeps the fowls from scratching up the roots, which sometimes happens where birds are penned in long grass.

Turkeys and geese and Guinea fowls might also find places in orchards, and oftentimes in fields after the crops have been got off, and at Christmas the amount realised for these would form a nice little reserve fund, which farmers would find very useful in many directions at that festive season.

Of course many details of management will be

found in their proper places in Chapter III., but I have just sketched the outline of farm life to shew the niches into which poultry keeping might well be fitted to immense advantage.

Then, of course, small holders would follow pretty much the same lines on a smaller scale, and turning from these favoured individuals we might pause, and just consider the poultry-keepers of the towns and villages who have fowls in their back gardens.

It would be a good thing if these poultry keepers, particularly those who live in towns and keep their fowls penned without a grass run, would always procure stock and eggs from the country-dwelling poultry-keepers; as stock is much better when produced by birds that have a good grass run, because health and full vigour are only to be had upon Nature's own terms, and those terms are exercise, fresh air, and good food.

Having obtained these, our backyard poultry-keeper would do well, in many instances, to associate himself with some society, such as that Lord Winchilsea proposes, so that instead of muddling along in a slipshod fashion, some better and more regular system might be instituted, a system which would ensure fair prices, and an absence of that petty competition which tends towards keeping prices low, all to no useful purpose.

I was much interested in an association that was started in a village in Kent, which had for its object the supplying of corn and poultry requisites, and also the better disposal of the eggs, &c.

The idea was very good in theory, but it did not work well, as tiny self-contained associations are not strong enough to carry on or deal with the varied interests which cling round poultry-keeping.

In this, as in poultry-keeping, the town and country districts must be united in a common interest, which shall be aided by the concentrated resource of both town and country dwellers.

The moral effect of this kindly interchange of assistance would be marked, and I should hope for many happy results as the outcome of a change as beneficent as it would be welcome to many who have struggled on alone, hoping for better and brighter days which have long delayed their coming.

My great ambition is to help my struggling fellow countrymen to reap the benefit of the large amounts of money which are going out into the homes and villages and towns of continental peoples.

To have done this would be a worthy work, that in the future would bring untold blessing to thousands that are living sad lives to-day, and I trust that statesmen and men of influence everywhere will rally to the call, and unite in one grand effort for the emancipation of agricultural interests.

ORPINGTONS OF THE FUTURE.

The Author's intention when he originated Orpingtons—Improvements—Work in general—Farmers' fowls—Lincolnshire Buffs *versus* Buff Orpingtons—Careful breeding and profitable results—Farmers' fowls as Scavengers.

MY readers will have gathered already that I take a great interest in questions affecting the welfare of those classes of the community that are living oftentimes unblessed, not because sufficient employment is not within their reach, but because through some cause, not always a fault of their own, they are unable to command it, and also other influences that would prove so beneficial by brightening their lives and adding to their comfort.

Many years ago I conceived the idea of adapting poultry-keeping to present day needs, and after revising the methods of feeding and general management, I found that the old breeds were, in many instances, sadly behind these times of scientific investigation and methodical systems of economics.

The introduction of American breeds, the controversy which this aroused, and the bitterness of the old breeders, all served to increase my interest in a question that became more and more absorbing and important in my opinion as I investigated theories and experimented with various breeds already in existence; and, as one after another the points of excellence seemed to become combined in various cross-breds, it dawned upon me that here in this selection and collection of the best characteristics of fowl life, I had hit upon a most important factor in the future of practical poultry-keeping.

Well do I remember the thrill of enthusiasm that passed through me at each successive step, and each oft recurring success, until the sneers of the old breeders, and the opposition of the few, faded into insignificance when the vision of a happier English rural life came up before my mind's eye.

As a boy I had learned to love country life, and the debt of gratitude I owe to the fair, sweet life of the country-side is all too great in my case for me to shrink from my life purpose because of a little opposition, so in furtherance of my great purpose I worked patiently on, as I intend always to do, until complete and crowning success shall have made many an English home happier, many a British heart light.

One marked feature of the Orpingtons has always

amazed me as much as it has gratified me, and that is the rapid development and improvement of the breeds, so that the last splendid Buff Orpingtons seem to surpass all others, and, indeed, rank high in the list of profitable breeds.

Some may be interested to know to what cause I attribute this rapid development. First of all I may mention that in the making of the Orpingtons good stock only was used. The birds, therefore, came forth excellent, not only in formation, but in the material out of which the breed was formed.

Skilled breeders will at once recognise in this a very important feature, as, of course, selection is everything if good sound breeds are to be established.

The law of Nature which makes bees kill drones that are superfluous, makes fowls peck the weakly chick, makes savages kill off decrepit persons, and weakly and old ones, is an evidence in itself that selection is Nature's own rule for governing the life of the animal kingdom, after a law of excellence which must be maintained if all the intricacies of animal life are to be maintained in full vigour and beauty.

So, of course, the best blood brings vigour and stamina into the birds that nothing else would produce.

Then again, the crossing of the breeds has imparted strength which the admixture of various

breeds has always produced, and the best blood blended upon right principles, of course, produces even more excellent results, as each successive cross has left its mark upon the breed.

Then again, Orpingtons have been in the hands of first class breeders. Many skilled hands and minds, besides my own, have been employed in bringing this breed to the perfection it has attained, and each variety has been eagerly sought after, and bred to the very best advantage.

And so, under these conditions, as Continental breeders have vied with our home fanciers in producing splendid birds of the noble breed, we can but foresee not only a great future for Orpingtons, but a greater breed of Orpingtons for the future.

Now let us turn a moment to consider the great work which Orpington breeders have to perform in the future.

Utility is the watchword of the hour. Opportunities such as have never lain within the grasp of poultry-keepers before, open out before the multitude, owing to legislation which is fast taxing privilege, and freeing the land from the bane of old systems.

Orpington breeders are called upon, so far, to fight a battle for excellence, that when the land is set free for the people, as it must be set free,

more than ever it has been, in the near future, the work of poultry-keeping shall have been so far advanced as to be at hand, so that poultry-keepers may "Go up and possess the land."

The show pen will always possess a strange fascination for many—the fancy will always hold its votaries in obedience, but the great future of the poultry-keeping industry does not lie here.

In the hard-handed, hard-headed toiler on the land—the farmer, the fruit grower, the artizan, and the dwellers in cottages of the country side, is seen the material out of which the new order of things is very largely to be evolved.

We must remember that *the trade already exists*, and that the ground is fast *becoming idle*, therefore, the great problem seems to be how the two things are to be joined together, so that the home produce may make its way into the home markets in sufficient quantities to command the bulk of the trade.

I have already shewn that English people will have *good* poultry, so it is essential that for the corn eaten and the labour expended, the very best possible birds may be produced

I feel quite satisfied that Orpingtons will do very much—as indeed they have already—to help to fill the great gap that opens out before us as we view the possibilities of the case, and

I can only hope that in the great social programmes of the future, some allowance and suggestions may be made and provisisns entered into, that shall still further bring these most important points of vantage into vital connection. But while we wait for the legislature, let us work on, so that when the great agitation commences, and, perhaps, a royal commission on poultry-keeping set to work, abundant evidence may be forthcoming, which shall at once convince the nation of its extreme value as an industry, and the government in power of the absolute necessity for some action on their part.

So much then for the general idea of the aspirations of poultry-keepers of the future. Now let us turn to glance for a little at the best methods for ensuring the profitable poultry-keeping upon farms, which seem to me to be very much the key to the position. "Barndoor" fowls have grown almost proverbial and the old figure of the Dorking much-crossed rooster has been for generations a familiar object in English farmyards.

It became apparent to me almost at the very outset, that if England was to become a great poultry-producing country, the tillers of the soil must do much towards providing, not only space, but also the skill by which the industry must be made profitable.

I have long advocated the use of pure bred cocks for the purpose of improving the farmers' fowls. But why should farmers be content with improved fowls? Why should they not have the very best that can be obtained? I would urge upon the attention of the farmers of the United Kingdom, that the poultry-keeping industry is well worthy of all the attention they can give it, and so, if they allow the present crisis to hound them to ruin, while this sister industry is ready at hand to save, the future generations of Englishmen will blush for the inactivity that prevented the agriculturists of this latter end of the nineteenth century from gripping opportunity, and laying the foundation of a grand success.

Let us now look at a few of the facts which stare us in the face as we consider this question of the farmers' fowls.

I have been greatly interested, as I have passed through some districts, to note on the spot some of the incidental statistics which are the little things that shew best of all which way things tend. I have found in some of the counties that a large number of small holders live upon tilled farms from 1 to 30 acres in extent.

The way in which the land often is purchased, seems to me scarcely a wise one, although, perhaps under the circumstances, it was the best

arrangement these small holders could make, viz.: of paying down £25 which they may have saved, and borrowing the remainder, say £75 for £100 worth of land, they, of course, have to go on living and paying off a little as they can, so that generally, instead of £2, they find that they have had to pay more like £3 an acre for the land when the interest is reckoned.

Starting as they do, at a disadvantage, under the most favourable circumstances, it would, of course, be a struggle for years, but sad to say, the land depreciated in value very much, in many cases not being worth more than a third of what was given for it, and I know many of the small holders, especially in Lincolnshire, would have been entirely unable to keep a roof over their heads if they had not resorted to poultry-keeping to help them along.

Of course, some have failed, but I have found that generally where poultry-keeping has been entered upon, even under the old condition of things, a certain security has seemed to surround the prospects and circumstances of the small holders. Of course, where the small farmer still owes money on his first loan, he is really worse off than those who rent land £1 an acre dearer and who have no interest to pay. The great thing to consider with regard to this question is that

poultry-keeping brings in a little each week and then a good sum at the end.

It would be interesting to look at some of the statistics of the old school management placed side by side with some of those which have been obtained by following the new and progressive methods of management.

Many farmers I have met have seemed to cling tenaciously to the old "Barndoor" fowls, which they have known from boyhood, and kept because their fathers kept them.

These old birds under old management, in the first place, were not healthy, and deaths were very frequent among them, and kept as they were almost to crow and cackle and look at, sometimes where 200 head were running, the poultry-keeper was often without a single egg for months together during the winter. Many cases of this kind came under my notice about 1885 and 1886, and served to increase my desire to provide something better for farmers to keep. Of course, 15 to 20 years ago this was about the general run of results, as poultry-keeping was as little studied as the weather cocks, as regards real financial results. People, therefore, who have awakened to the facts and taken up matters in real earnest are found to-day utilizing many things that in these more wasteful times were allowed to pass by unheeded, and lost altogether.

I have been glad to see the carefulness of some of the Lincolnshire farmers. One expedient struck me as peculiarly ingenious, viz.: where some of the farmers had cut niches in the sides of some stacks so as to put the coops for hen and chickens in out of the winds.

Of course, the best way to combat prejudice and convince practical men—and Englishmen are practical—is to adduce facts that are beyond controversy, because proved beyond dispute. I will give at this point a few facts, in figures, which shew the comparative values of birds of certain breeds for laying purposes.

I have shown how that the old poultry keepers cared little for eggs or profit, and indeed thought lightly of the whole thing, and, of course, lack of interest and lack of skill caused neglect, and, consequently, even had the good birds existed, possibly, very little better results would have been obtained.

I find upon comparing the laying results of the old "Barndoor" fowls, that on an average each bird would produce 45 or perhaps 50 eggs in a year. This would be the average on a hundred farms. Then again, pure Dorkings, the great breed of the past, would produce an average of 40 each, or possibly some might lay up to 53.

Side by side with these I place the results from

pure Orpingtons, which produce on the average 120 eggs—most of these are laid during the winter months—each in the year, and in some cases 150, 170, and 200 each.

The crosses from Orpingtons, as I have shewn on pages 36 and 37 also produce remarkable laying results, as well as developing table qualities, that have at once assured them a high position in the ranks of market poultry. My great point in producing the Orpington has ever been that in combining laying and table qualities the greatest economy was shewn, as the birds that produced the eggs were growing into money as well. Some of the farmers of Lincolnshire have shewn their mettle by at once adopting the more rational methods I have always advocated.

Instead of selling their wheat at ruinous prices they have fed their fowls upon it, and they have found, in many cases, that for every quarter of wheat used in this way, £2 has come back in the money obtained for eggs and table poultry. This they have proved to me by the accounts they have kept.

All this serves to shew that farmers are really the men for poultry, and as I have journeyed to and fro in Huntingdonshire, Lincolnshire, Northamptonshire, Bedfordshire, Lancashire, Cheshire, Dorsetshire, &c., &c., and have marked the increase

in the number of eggs produced under new and improved methods of management, I have felt a great desire to spread throughout the length and breadth of the land, large flocks of good profitable birds that would work mighty reformation in the financial results of the farming and fruit growing industries.

And now I come to a comparison which it seems necessary for me to draw between the old Lincolnshire Buffs and the Buff Orpingtons which form the last of the Orpington varieties. Of course, these two breeds are quite distinct, but I want to shew how superior the Buff Orpingtons are in many ways to the old Lincolnshire Buffs that have been for years the favourite fowl of Lincolnshire breeders. Lincolnshire Buffs are a good useful breed in many ways, and on the cold unsheltered farms of Lincolnshire they have earned for themselves—and justly too—a reputation for hardiness and egg production which has caused many to take them up and keep them as the best breed they could obtain for general purposes.

In spite, however, of all their good qualities, the Buffs have always been a mixed variety. Bred as they have been, by a process of indiscriminate selection, the cock that was introduced to infuse fresh blood being sometimes a good Cochin or any other that would be likely to produce

Buff birds, all sorts of excrescences, such as feather on the legs, have testified to the great carelessness that has been shewn in the preservation of the old Buff in the past. On the other hand, as readers will have already learned, the Buff Orpingtons have been bred carefully on scientific lines, and in contradistinction to the old style of preserving a breed, skilled breeders have worked not only to preserve but also to improve still further the noble breed which seems to fulfil in so many particulars the demands of the poultry world.

I need not again show what this means, or further compare the breeds. "The best is the cheapest," and if success is to be gained it is advisable for farmers and others to be abreast of the times and keep Buff Orpingtons, which have been proved by very many farmers I have met to be the very best birds for keeping upon farms that have ever been produced, because in Lincolnshire, farmers are prejudiced in favour of Buff birds, so that I have not been surprised to find one after another giving up Lincolnshire Buffs, and going in for Buff Orpingtons, as they learn from the experience of others how much better these birds have proved themselves to be, especially in the laying qualities.

Thus we have seen that a dawning interest is

making itself manifest by the seizing of opportunities that offer by farmers who have made up their minds that nothing shall be wanting on their part that is likely to better the Agricultural position. I believe the day will come when the English nation will hold in reverence the names of those who in this present crisis have persevered to introduce reform, and I am glad to find that week after week, as poultry literature is sent forth from the London Press, the statistics there given of what poultry keepers have done and made will serve to awaken people to a sense of the great opportunities that lie within their grasp. Of course, careful breeding must ever be one of the great secrets of success in poultry keeping, and I would emphasize it at this point.

Farmers should be as careful to breed good fowls as they are to produce fine pigs, sheep, or horses, and as I have shewn, with regard to the laying results, which prove the value of the Orpingtons, the only sure road to success is found in proper selection and judicious management, as bad fowls eat more sometimes than good ones, and, of course, produce little or no result.

The great scheme of reform in ways and means for the successful farming of the future includes the application of many little details of management, which are now overlooked and neglected

by those who go on year after year in distress, until the climax is reached and the end comes swift and sure.

We must always remember that the fowls of the earth are in reality Nature's great scavengers, living as they do upon many insects which would, and do oftentimes, prove injurious to the crops.

For fowls in confinement it is found necessary to mix up a hot breakfast of meal or soft food, which shall find its way into the bird's system and begin its work of nourishment almost as soon as it is eaten.

The old proverb, "The early bird catches the worm" conveys, as many of these old proverbs do, a good deal more of truth than appears just at first sight.

Anybody being an early riser, who has opportunities of observing the movements of birds in the early hours of opening day, will have noticed that wild birds are abroad seeking their morning feed of insect life before sunrise. As one wanders along, a plump thrush will fly across the path, and settling where it may be seen, a long worm possibly may be observed wriggling in the grip of its beak, which the bright-eyed songster, that Tennyson so often hailed as the herald of the springtide, had captured, as this early rising worm

had gone forth on some mission and left the security of mother earth.

And all along the country side, in the freshness of the early morning, with chirp and glad energy, these feathered denizens of wood and field seek out their apportioned repast. What should all this teach us? Fowls are fowls all the world over, and what Nature teaches birds to seek after we may depend upon it is the best food that can be provided for them. Here, then, the farmers might do much to keep fowls cheaply.

One of my plans for giving the fowls access to the stores of insect food which the fields contain, would be to have 100 or 150 fowls that would run all over a field in which ploughing was going on. The old familiar picture of the rooks following the plough should give place to another in which a flock of fowls should take their place and eat up the grubs and worms as they are turned up out of the ground by the plough. In some places, near the sea coast, I have seen quite a flock of from 50 to 250 gulls, but if fowls are turned in they will hold their own and peck the wild birds until they fly away.

Some farmers have poultry houses, one in the middle, and one at either end of the field, so that all the ground is covered, as soon almost as it is turned up, by the hungry fowls.

The fowls will find in the fields certain weeds also, which would be good for them, and, indeed, it would be almost a natural existence for them, and farmers would find they would thrive and do remarkably well.

Another good time to turn fowls in, however, is during harvest time. It is good for the laying hens if a number of houses are put out and they are allowed to range over the grass fields from April up till harvest time, but as soon as the corn is cut, the whole flock should be turned in among the shocks as soon as they are bound and put together.

Farmers need never fear that the fowls will injure the good corn, as plenty of loose grain is shaken out in the process of binding and putting together ready for carrying.

Of course, the wild birds would soon clear up all the loose corn, but it is better that the farmer's own fowls should live on this and thus preserve to their owner the full benefit of his produce. It is a good thing also because sometimes where wheat or other grain is left lying in a field, when another crop is put in, the corn grows up and this spoils the sample, so it is a good thing to clear the ground of all that might be left.

A good deal of insect life is picked up in the

harvest field that would never be found in grass fields or on fallow land, such as spiders, caterpillars, and beetles of various kinds which collect in numbers among standing corn.

During a visit to Lincolnshire I was greatly interested in the mustard growing, which is carried on to a large extent in some parts of the county. The farmers here are troubled very much by the ravages caused by mustard beetles, these beetles eating off young crops and doing a great deal of damage. Round, and of a metallic green, these beetles look something like a large green bug.

Of course, when there is a good strong crop, the mustard grows up too fast for the beetles to eat it off, although even then they do a good deal of damage, but where only a weak crop is coming up, in some instances every particle is cleared right off. They get in the stalks where there is a strong growth, and when the mustard is cut down, as it is at about six to nine inches from the ground, each of the stems will have from 10 to 30 in it.

Starlings are found in great flocks in the fields, coming for miles when they get scent of a mustard field being cut, and so many of the beetles are cleared off by the wild birds. I have recommended people to turn the fowls in to con-

sume the beetles, as 100 to 400 fowls would get their living for weeks, so numerous are the beetles when a good crop is cut, besides many weeds that are beneficial to them, that the birds would pick up.

Of course the growing of mustard is not a general thing among ordinary farmers, but I mention this to show how well poultry keeping lends itself as a kindred industry to the other avocations which fall under the broad heading of farming. Where ground is infested with wire-worm it is a capital thing to coop the chickens and fowls where they can run over the ground, especially early in the morning, when so many insects come out and are easily picked up.

I might give here a little experience that happened in my career a few years since. A farmer came to me and told me his ground was infested with wire-worm. I was greatly interested and gave him the best advice I could. I had observed, being a keen naturalist, that wire-worms come out after dark. Another thing that fitted in with this was the fact that ducks also go out when in a wild state to feed after dark. So I recommended my farmer friend to get some young ducks, and pen out over the ground a little at a time, so that eventually the whole might be gone over by the ducks, letting them stay about three

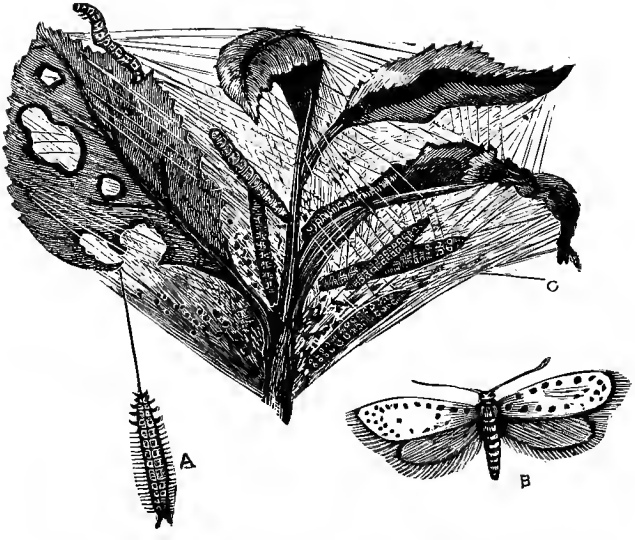
days upon each section of the field that was penned off. It is a well-known fact that wild ducks stay at home all day, and then fly away to feed after sunset, and as fowlers and sportsmen know full well the best time to push off the punt and load the fowling piece in marsh, or fen, or reedy morass, is in the evening when the ducks more readily obey the call of the decoy bird, thinking it is some friendly neighbour giving them the benefit of a find.

Some may say, "Do not the ducks lose this characteristic when domesticated?" I can only answer, No. If ducks are let out after sunset, when it is quite dusk, they will soon spread right away over the fields, picking up worms that will perhaps have been on the move, as the worms are abroad from nightfall until daylight next morning, and the ducks can see in the dark, so they would feed upon them, and soon make a clearance. The worms would be especially plentiful and easy to be got at during their breeding season, which commences early in the Spring, and goes on through May and June and longer than that if it is a wet season. So the ducks would thrive on the insects and clear the fields.

In one of the Midland Counties in 1885, and also during the last few years, a good many wire worms and slugs were found in mangold wurtze

THE LACKY MOTH (*Bobynx Neustria*).

A, Caterpillar. **B**, Moth.



THE SMALL ERMINE MOTH (*Hyponomeuta Padella*).

A, Caterpillar. **B**, Moth. **C**, Lava in Web.

fields, and in the hop country also these pests were found in large numbers.

I well remember, about ten years ago, while walking through some of the hop fields, I noticed that the bines at the top of each pole met and formed a nice shade as we walked along. My farmer friend was speaking of the cost of syringing the hops to kill fly, and looking on the ground I noticed that underneath the bines, and round the bottom of poles, where they entered the ground, large numbers of these were lying. I well remember turning to him and advising him to coop young chickens among the hops, so that they might pick up, and thus destroy a very large proportion of these pests of the hop garden.

Hop growers should bear in mind that very many of the flies, when they fall off the leaves and bine on the ground, crawl along and get up again on to the leaves, whereas if chickens were placed with hens in a coop, so that the little ones were free to run in and out among the poles, they would make a fine meal upon these insects and thus save the hop grower much trouble.

The farmer followed my advice, and it has saved him a good deal of trouble with his hops ever since, and many others have followed in his footsteps to good advantage. Where farmers have only a few fowls, it would be a good plan for them to allow

cottagers and others who would be careful to coop their chickens in the gardens, as mutual benefit would be the result of such an arrangement.

Another point at which poultry might be utilized in hop gardens was also brought under my notice, quite in an informal way, as I was walking through a hop garden which had been newly planted with young bines. These I found were infested with wire-worms, which were doing a good deal of damage round the roots of the young plants.

I advised, in this case, that pieces of potato should be laid about the garden, so that the wire-worms would attack these, and so collect together, in order that a pen of young ducks, turned into the garden, might find out the whereabouts of the wire-worms and destroy them.

Hop growers should give this subject careful attention, as a good deal of washing and syringing might be avoided if fowls and ducks were used for the purposes Nature intends them to exist for, viz.: to clear the land of vermin, and many of those pests that have long defied, to a certain extent, the best efforts of farmers to destroy and keep them under.

Of course a certain discretion is necessary in all undertakings of this kind, and it is wise to be very careful lest the remedy should grow into a worse thing than the disease.

FIG. 1.

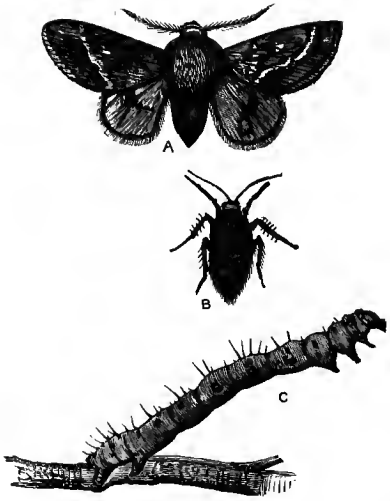


FIG. 2.

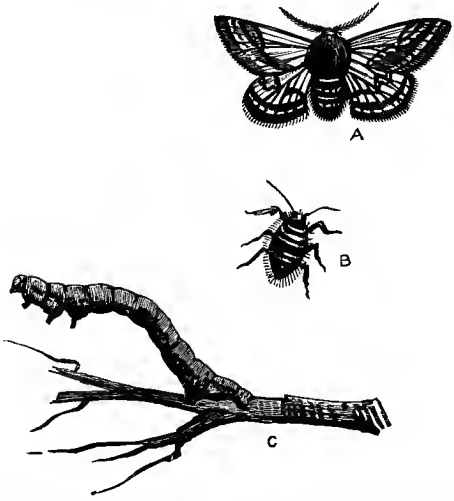


FIG 1. THE SMALL BRINDLED BEAUTY (*Nyssia Hispidaria*).
A, Male Moth. **B**, Female Moth. **C**, Caterpillar. Natural Size.

FIG. 2. THE BELTED BEAUTY MOTH (*Nyssia Zonaria*).
A, Male Moth. **B**, Female Moth. **C**, Caterpillar. Natural Size.

The subject of vermin and insect life is, of course, a very wide one, but to the fruit growers and farmers of our rural districts it becomes one of extreme gravity when we consider the ravages oftentimes caused by caterpillars, which develop into Winter Moths, and which, in the Spring, when the young leaves, buds and blossoms are at their tenderest, make off sometimes with very much of that which should develop into fruit.

I have given illustrations of some of the principal varieties of these moths, which, in their turn, produce the caterpillars that eat up the foliage, and play havoc altogether with the crops.

These moths seem to be divided into two kinds, the first being those that come from the caterpillars, which appear in the early Spring, while the second group seem to come from the late Autumn and Winter caterpillars, which produce moths about February. It would be a very wise and safe mode of procedure for farmers and fruit growers to turn in fowls upon the ground, so that they might eat up and thrive upon the caterpillars that constitute so dreadful a pest, causing sometimes serious loss to those who are anxiously awaiting the appearance of fruit, to recompense them for heavy outlay and labour expended. Very many remedies have been suggested, some of which, while crude, are ineffective, and are only just weak attempts to deal with the

problem, made in despair after these men have suffered continual anxiety and great loss.

One or two things must be borne in mind by those who follow up this question, the first of which is that the grubs of these moths seem to abound most of all where the plantations are dug or cultivated. Of course the modern form of fruit growing precludes the possibility of ploughing between the trees, as where underfruit is grown it would be impossible to do any other than just dig the ground, as is generally done in most of the plantations. The consequence is that many of the chrysalides are not turned up, and continuing in the ground they mature, and the moths being produced, these, in their turn, lay the eggs from which come the caterpillars for the next season.

I should recommend that birds of the good, active, hardy breeds, such as the Game varieties, Orpingtons, Leghorns, or Minorcas, &c., should be turned into the plantations, as active birds of any breeds would not only follow the men as they were digging, but also scratch over the soil, and so get out many of the chrysalides and devour them before they came to maturity.

The digging in the plantations is usually done between early November and the end of February of the next year, so that if the weather were not too severe to allow of its being done, the winter layers

FIG. 1.

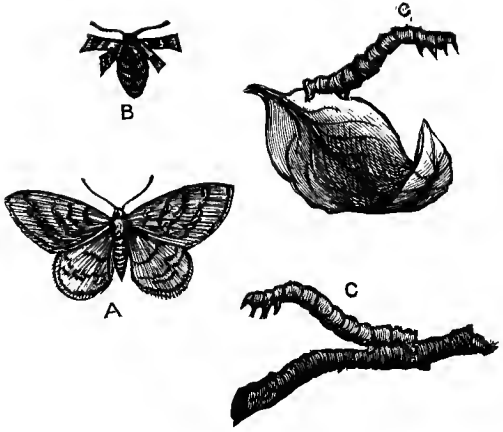


FIG. 2.

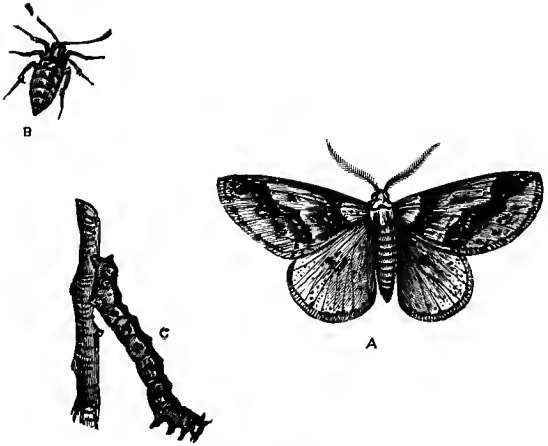


FIG. 1. THE WINTER MOTH (*Cheimatobia Brumata*).
A, Male Moth. **B**, Female. **C**, Caterpillar. Natural size.

FIG 2. THE MOTTLED UMBER MOTH (*Hybernia defoliaria*).
A, Male Moth, **B**, Female Moth. **C**, Caterpillar. Natural size.

FIG. 1.

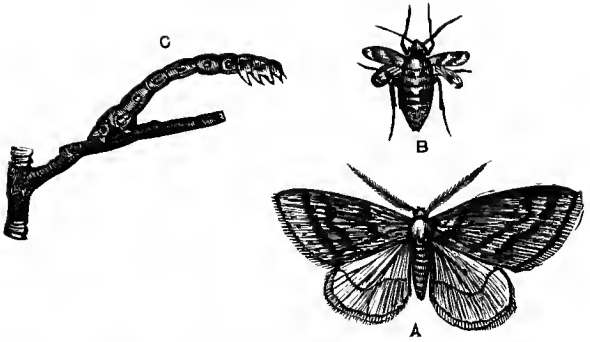


FIG. 2.

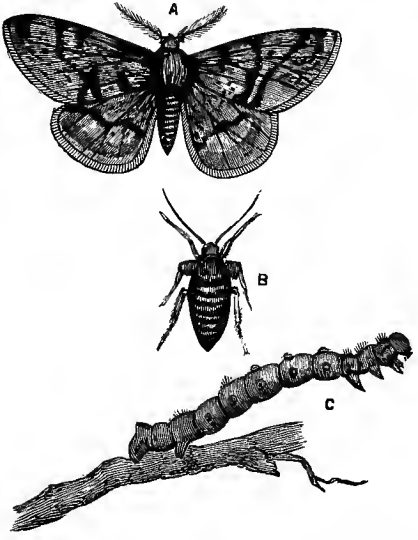


FIG. 1. THE SCARCE UMBER MOTH (*Hybernia Aurantiaria*).
A, Male Moth. **B**, Female. **C**, Caterpillar. Natural Size.

FIG. 2. THE PALE BRINDLED BEAUTY MOTH (*Phygalia Pilosaria*).
A, Male. **B**, Female. **C**, Caterpillar. Natural Size.

would get a lot of insect food that would greatly help their laying at a season when the utmost vitality is needed.

I speak of this question of fruit growing—as, indeed, I do of every other practical one—from experience extending over years, and I have found that where fowls have been allowed at certain seasons to run into the plantations, not only have larger crops been produced but the fruit itself has been finer in size and quality. The pests we have referred to are to trees what vermin are to fowls—they rob the trees of the very vitality so necessary for the maturing of the fruit in this all too treacherous growing climate, so changeable and so little to be depended upon.

There is a good deal to be said in favour of the cultivation of the ground round fruit trees, but I am of opinion that grass is after all the best thing to grow under the trees.

A great deal of labour is expended in the digging of plantations which, in the case of grass orchards, is never necessary, and where poultry and other live stock are also kept, the manure at the roots helps very much to nourish the fruit trees. I have found my apples, pears, plums, and damsons in grass orchards helped greatly by this means, and the continual pruning of the under fruit causes a good deal of labour over and above the digging

and hoeing before-mentioned, which is always an expensive item every year after the gooseberries and currants are all gathered. Where, however, the plantations are dug, the caterpillars that appear in May and June would make fine fare for the numerous chickens hatched during that period of the year.

These should be cooped in the plantation with the hen so that they could run in and out among the trees, and if the trees were shaken many of the caterpillars would fall off and be very quickly devoured by the chickens, who would thrive upon them and do well.

Of course the wild birds feed upon these pests, but cannot keep them under to any appreciable extent, so that large flocks of chickens or fowls, in the Spring or Autumn, would get the greater part of their living if they were allowed to scratch for it in the plantations as I have suggested.

Fruit growers should give this matter their earnest attention, as poultry-keeping assumes a far more important position than ever, when, with regard to the fowls, instead of these living upon the farmer, the farmer in part lives upon them, and is helped in every way by what they do.

Then again, the poultry would do, as a matter of course, much that is very ineffectually performed by expedients farmers and fruit growers have

resorted to. Various compositions have been introduced, some of which have killed the vermin in part, but killed trees and all, and many ingenious inventions, all more or less ineffectual, have been bought up by the despairing farmers, until they have almost given up hope of any real relief at all.

Here, in this phase of poultry-keeping, is the solution of the problem, and I shall hope to show the distressed fruit farmer a way of relief from one of the most vexatious hindrances that has retarded the progress of top and under fruit growing for some years past.

Another thing should be borne in mind, and that is that fowls would scratch up and destroy many of the surface weeds, and so much hoeing would be saved, all of which makes a difference to the bill of cost for labour.

So much then for the cultivated plantation land. I come back now to the old grass orchard, filled with good, young, fruitful trees. Under this system it is possible to be raising three crops at a time, as sheep are kept under the trees, and then on the shorter grass, poultry run, all helping the fruit trees with excrement, and above everything, by the clearing away of vermin which might crawl up the trees and do much damage.

So a good crop of grass is finding food for stock

and a nice run for the poultry, which under these conditions would be healthier than any other.

Another phase of this vermin question is found in the study of the habits and formation of the common earthworm.

As is well known to lovers of Nature, wild birds bring up their young very largely upon worms, as well as feeding themselves upon them, especially in the breeding season. Where a good many leaves lie on the ground, and also manure, worms will abound, as they always breed so much faster when this is the case.

The work of Nature in utilizing the seemingly wasted things is very wonderful, and in the case of the leaves I have found that the worms draw these into their burrows a little at a time and feed upon them.

A worm's intestines, if opened after the morning feed, will be found full of the fibrous matter which has formed the framework of the leaves and grass.

The remarkable thing about the earthworm is that it comes to the surface again to deposit its burrowings. These may be seen in little heaps generally upon pathways, but all over the grass-fields these little lumps of earth may be seen, so numerous are they in most instances that bush harrowing has to be resorted to—as indeed should always be done (bush and chain harrowing and

rolled after) to scatter the fine mould evenly over the ground, as the little heaps would make the field lumpy if it were not harrowed and rolled.

Of course, it remains to be seen how far these worm burrowings have manuring properties, but in any case, it is always well to harrow the field so as to scatter the fine mould among the roots of the grass, for, I believe, where a good number of these earthworms are continually burrowing, they do as much good as would be the result of a thin coating of manure.

But there is another phase of the question which is even more important, and that is the value of both earthworms and earthworm burrowings as food and medicine to the feathered tribes.

As I have before observed wild birds feed freely upon the earth-worms which they catch in the early morning. Almost all the larger varieties, such as Rooks, Blackbirds, Starlings, as well as other smaller birds, feed upon them and appear to thrive and do well.

Perhaps it has never occured to my readers to really investigate the cause of the great vitality and splendid health of the wild birds.

As I have fully established, in my former writings, chickens need grit as soon after hatching as they begin to have food. The feathered tribes are nearly all alike in this particular, this grit forming the only

power Nature provides them with for masticating their food.

I had noticed that chickens always did better when they had plenty of worms, but, until recent years, I had never really understood just why this was.

When chickens seemed out of sorts, drooped their wings, and seemed ailing, a good feed of worms generally set them right very quickly.

I have asked many people why this was, but was usually told it was because worms were their natural food, and there the matter ended.

A little time since, I heard, through a friend, of an old Norfolk woman, who made it her boast that she was very successful in rearing young pigeons and chickens, where other people failed, owing to large numbers becoming crop-bound.

Like very many of these old country folk she possessed a secret, which she communicated to my friend, who told me that it consisted of giving to the young things *the burrowings of earth-worms.*

It flashed upon my mind instantly that here, in this simple remedy, affecting as it did a vital principle in bird life, lay another of those wise provisions of Nature which I had not hitherto investigated.

I was not long before I made myself acquainted with the anatomy of the earth-worm, and to my

astonishment I found crop and gizzard and *grit*, and, indeed, in addition to the not inconsiderable amount of flesh and blood forming the body proper, each earth-worm contained a quantity of sharp sand, and in some instances quite large pieces of *sharp grit* more than an eighth of an inch in length, as well as pieces of brick and coal, cinders and sharp stone, larger even than this. In short, the crop and gizzard contained grit large enough for quite large chickens.

It must be understood while fowls can only get grit upon the ground, worms go several feet below and obtain grit, so in these burrowings a supply is found brought to the surface by the worms.

Here then lay the secret of the old woman's success with her rearing: evidently, the earth-worms, containing grit and nutriment combined, pass, like other soft food, right into the gizzards of young birds and, containing grit as they do, in addition to the flesh and blood of their bodies, form good nutritious food and masticating material combined. So with the caterpillars of the moths I have mentioned. Doubtless the feathery material out of which moths would grow, which is contained in chrysalis and grub, and with earthworms, which contain nutriment and grit, farmers and others would find it well worth their while to allow their chickens full liberty to eat up the insect life which

so troubles them, and would so well feed their fowls and cause them to outdo even the best results of the past. Very much that interests poultry-keepers clings round this idea, and I have known Indian Runner ducks lay 120 to 150 eggs during the season, when they have had liberty to pick up plenty of insect life.

I have only recently learned that a duck keeper in the district in which I live, who has splendid Aylesbury ducks laying nearly every day, attributes this largely to a liberal supply of earthworms with which he feeds his ducks, so that often they will leave the soft food that is given them—being satisfied.

Of course, if ducks are to avail themselves to the full extent of a good feed of worms, &c., they must be let out in the late evening.

A great difficulty presents itself where foxes abound, because the ducks are likely to be carried off. A good way to train the ducks to come home is not to feed them during the day, and then let them out after sunset and leave them out for two or three hours, after which a little corn should be put into a trough already containing water, and this will train them to come home, as they will look for this each evening and come home to find it.

In some cases, a good sheep dog or fox terrier,

carefully trained, would guard the ducks and keep the foxes away.

In the marshy districts of Lincolnshire, and many other places where there need be no fear of foxes, the ducks might be out all night. It would be well, however, to keep the stock ducks in, or the eggs may be lost, as ducks generally lay between two and six in the morning. Ducks can be trained to come home at a given signal, such as clapping the hands, or the ringing of a bell, or blowing a whistle, if they are taught when young.

Geese are very useful to farmers, especially if not kept in too large numbers. Of course, in the fen district many are reared, but under ordinary conditions, a few stock geese do well if they are allowed to run out in corn fields among the stubble, and they will often pick up half their living. Stock geese, however, do best upon ordinary grass meadows where they can get plenty of grass. From late Michaelmas up to Christmas, if tended well, geese will fatten, and, of course, they are valuable then for the market.

Stock geese, however, should be kept separate, as if they grow too fat—and they have a tendency so to do—this interferes with their laying and they do not produce half as many eggs as they otherwise would.

Stock geese should be fed up from the beginning of January, having a little hot food in the morning and a feed of corn at night and plenty of grass.

Of course, not much insect life is to be had just then, and it is necessary to substitute some good nutritious food such as I have mentioned.

If they are carefully fed in this way they will lay plenty of eggs and be profitable, beginning to lay about the end of January or first week in February, and instead of 9 to 13 eggs each, perhaps, from 25 to 35 will be laid before they come on broody.

I have been very pleased to notice, in some parts, that farmers have taken up pheasant rearing, as good profits may be made if the industry is properly managed, and I hope farmers will read my book on "Pheasants, Turkeys, and Geese: and how to make them pay," which gives in detail many little particulars that would obviously be out of place in this chapter.

I might, in conclusion, give a few particulars of personal experience with the methods I am now advocating. Of course, some of them are quite new, and I am anxious my readers should know that by experiment I have proved what I write to be true.

The question of the destruction of such pests as slugs, &c., has always been one that has engaged

farming experts for many years, and many expedients—unclean some of them and often of little use—have been resorted to, so that if poultry would clear off a good deal of the insect life, that alone would entitle them to a good deal of consideration.

Where cabbage plants, brussels, mangold wurtzel and turnips, or other soft, leafy stuff is grown, these crops would be preserved to good advantage, if before planting, the ground had been well run over and cleared of these pests by a good flock of active fowls, who would thrive famously upon these un desirable things.

I give here a method of dealing with wire-worm which I copied from a farming publication:—

"The best treatment for wire-worm is a heavy dressing of gas-lime fresh from the gas-works. The quantity usually applied for this purpose is from six to ten tons per acre, but, if extremely badly infested, a larger dressing may be advisable. If the kale has suffered severely, the attack is doubtless very severe, and it may be advisable to give as much as 13 or 14 tons per acre, but in that case no crop of any kind can be obtained this season, *as the poisonous properties of the gas-lime would destroy any crop.* A dressing ot ordinary lime would be of considerable service, but if the land is to be under corn a dressing

of soot, 60 bushels per acre, sown with the corn would be of great service. If it is essential to take a crop this season and the land is not yet sown, mangold wurzel may be taken, as the crop will not be much injured, but, if a crop of white mustard be taken, the land will be practically freed from wire-worm, for not only are wire-worm powerless to injure white mustard, but the crop will practically destroy the wireworm."

This would cause a good deal of carriage, trouble, and expense, and then if the gas-lime is not spread evenly, it not only causes loss one year but sometimes the second, besides which there is the risk of poisoning by using such stuff.

I have found it better to use ducks in such cases, as they run under the leaves of the green stuff, and clear a good number of the worms.

I once knew a farmer in Lincolnshire who had fields of turnips and mangolds which were suffering very severely from the inroads made by wire-worms and slugs.

He turned in some 150 ducklings, who soon made a clearance of these pests and the crops were preserved.

Ducks are very different to fowls in their ways and doings, as, when turned into fields in this way, they roam about more. It is best to let ducks out in the fields in the evening, as this is

the time they would feed if they were wild, and their prey would just be on the move at that time.

Farmers should keep a lot of ducks, and my book on "Ducks, and how to make them pay," would show them the best way to do this. Especially do I recommend Indian Runners, as these active, hardy ducks are best suited to this roaming life, and they lay better when they have more liberty. They are not so likely to be caught by foxes, &c., as, whenever anything upsets them, they fly away home at once. They are nearest to the wild duck of any of our domestic varieties, especially in their habits.

It is not quite wise to turn ducks in on stubble fields, because the short stubble pricks their web feet and this makes them very sore. This would have the undesirable effect of making them less active than they would otherwise have been.

I have dealt elsewhere with the question of hop growers' difficulties and the best means of overcoming them, and I will conclude this chapter by showing the influence of fowl manure, &c., upon one of my own orchards, that had for years been comparatively unproductive, and concerning which I was told it never would grow fruit. I first put fowls in in July, and when the next fruit season came round a marked increase in the

quantity of fruit was seen. The second year a fairly good crop grew, but the third season a fine crop filled the trees, and the fourth year the trees were a sight to behold, and hundreds of people came to see the trees loaded to breaking down with fine, ripe fruit.

The trees were from 16 to 20 years old, so that they were comparatively young.

I also knew, at a place in Buckinghamshire, of some cherry trees that were from 30 to 50 years old. These trees bore scarcely any fruit, and the ground was so poor that it seemed scarcely worth cultivating. A gentleman took the farm and turned hundreds of fowls into the orchard, and his experience was precisely similar to my own, for soon a wonderful improvement in the fruit crops was noticeable, more fruit being produced than had ever been got off the trees before.

These facts, of course, speak for themselves, and so I trust what I have given in detail as good rules for management will be carried out so that the last happy general results, with which I conclude the chapter, may become general, to the improvement of the fruit growing industry and farming generally, for these great industries—as, indeed, does success in everything—depend for very life and success upon the influence of careful attention to little details, and conquering little

hindrances. So may poultry help the farmers of this country to till the land to good advantage, that they shall not only make poultry pay, but that poultry shall help them also to make greater profit and get increased returns for time and labour expended.

ORPINGTONS AS POOR MEN'S FOWLS.

Back-yard Poultry-keepers—Needs and necessities—Orpingtons suit all round—Birds for the times—Working Men as Orpington Breeders.

AS I have shewn in a previous chapter, a very large part of the poultry sent to this Country from Continental ports is produced by cottagers and small holders that keep fowls in their back gardens, or upon their little patches of land.

If poultry-keeping is to benefit the working population of this country, a very large increase in the number of back-yard poultry-keepers must make it possible for eggs and birds of good quality to be produced in ever and increasing numbers, so that the home markets may be filled with home produce

During a visit to Northamptonshire, right in the midst of the boot manufacturing districts, I was greatly pleased to see the keen interest that perhaps a man and wife and two or three grown-up children

who, all employed at different branches of the boot trade, showed by running out in turn to the place in the gardens where their fowls were kept and tending them, thus giving them a little relaxation from the monotony of such lives as they live, close confined in their own little living rooms or workshops, where much of the work is done.

And so in many parts of the Country, the dulness of a town life I have often found relieved by the little cinder ash run, with those feathered friends that bring something of brightness, as well as profit, to those who struggle on with little to lighten their hearts, and not much to brighten their lives.

One thing that has been very gratifying to me for some time past, is to have heard, continually, of the good results which many of these back-yard poultry-keepers have had with Orpingtons.

Of course the reason for this is not far to seek. The Orpingtons have come to these poultry-keepers full of that vitality which is so necessary in birds that are to withstand the enervating influences of life in the smoky atmosphere of a town or large city, or the confinement of small runs.

Then again, in the very nature of the birds, with their fine table qualities, many points are found which could never have been obtained in any other way than by the judicious blending of the breeds.

This pleasurable experience will increase as the birds work their way, and I am confidently hoping for great and increasing results, as the poultry-keepers in our large towns wake up to the fact that these grand birds are so much more profitable than the miserable mongrels so many content themselves with.

I think, at this point, for the better information of my readers, I will state what I believe to be the most suitable birds for back yard poultry-keepers, because this phase of the question has a good deal more in it than appears at first sight. The great lack in poultry-keeping for the English markets is *numbers*. Salesmen can get good birds, but not in sufficiently large numbers to ensure a good supply. One has only to refer back to pages 45 and 46 to see the large numbers of birds and eggs that must be imported to come to the immense sums that are paid out to continental dealers. And then, when we remember that a very large proportion of all this immense collection is produced by the small holders and back-yard poultry-keepers of the continent, we cannot but feel that if our English cottagers could but be induced to take the matter up in earnest, great and lasting good would be the result.

Birds for the back-yard must be bred from stock kept in the country, or if any breed in towns, plenty of good scratching exercise should be given by burying corn in the ground, as well as a good supply

of various kinds of green stuff. Strong birds may then be produced, even in small runs in back gardens in the towns. The stock bred in towns never does so well unless the birds have this attention, but if this be given, oftentimes the birds will average from 15 to 25 eggs more than country birds kept on grass. Then having got together some good birds, it should always be made a point to introduce a fresh, pure bred country hatched cockerel, so as to introduce fresh blood and vitality each year.

Orpington cockerels are the very best for this purpose, and I will say just why.

In the cross-bred fowls so many people so justly admire, of course, a certain vitality and hardiness exists, which is very essential, especially in town kept birds.

The Orpington, so recently made and set into a breed, retains very much of the vitality which cross-breds have, although breeding true to type and colour, as well as most of the other pure breeds.

In the back yards, upon cinder ashes, the fine, massive Black Orpingtons thrive and lay well, and thus fulfilling the expectations of enthusiastic poultry-keepers, these really useful birds are already doing much to make back-yard poultry-keeping the success it ought to be when the birds are managed properly. Of course it is not possible to deal with every side of the all important question of breeds for back-

yards, but I hope much for the very best results to be obtained from the breed that has in it so many of the most necessary characteristics which are required in birds used for that purpose.

I have shown in Chapter II. that the needs of poultry-keepers who live under varied circumstances necessarily differ, and this was not forgotten when the Orpington breeds were first formed. The circumstances under which the birds are kept, however, do not generally govern the results gained so much as the neglect or good attention to details which is allowed to exist by the owner.

For instance, I may say that I receive many letters daily asking for advice, and sometimes complaining bitterly of loss occasioned through nothing but the continued and culpable negligence of poultry-keepers, who are anxious for good results, but are not careful to attend to those little details which ensure success.

The great need of town poultry-keepers and, indeed, of breeders in a small way generally, is a good all-round breed, and one which, with good laying and table qualities, will, so to speak, yield a return which at one time would only have been expected from birds of two or three breeds together. Wher only a limited space is at disposal for the fowls, o course, only one breed can be kept, and with a limited income it is highly

important that good birds should be selected.

The importance of this will be seen when I point out the run of events as evidenced by some political economists of past and present days.

We have already remarked how little poultry-keeping has been thought of as a lucrative industry in the past, and in Adam Smith's "Wealth of Nations," we find the following suggestive passage:—"But in countries almost waste or but thinly inhabited, cattle, poultry, game of all kinds, &c., as they are the spontaneous productions of Nature, so she frequently produces them in much greater quantities than the consumption of the inhabitant requires. In such a state of things the supply commonly exceeds the demand."

And in no more detailed form do we find the poultry-keeping industry dealt with, so, evidently about 1750, in connection with the questions of agriculture, or even small holdings, the raising of poultry was looked upon as a thing of small importance.

John Stuart Mill, who wrote about 1850, gives up a good space to the discussion of agricultural interests, and broaches somewhat upon the industries of the continental farmers and Swiss holders of the valleys and plains, but in these days of farming prosperity little could be said, except perhaps to lament the lack of system which prevailed in the

easy going days of a farmer's life, when, just before the decline, wheat was making good prices, little heed was given to any other thing, especially the idea of making profit out of the poor despised poultry, was then a matter quite out of the question, and even Professor Marshall, writing to-day, leaves the question of the agricultural problem until a future volume which is under preparation. But many principles of every day life come under the headings contained in this very valuable exposition of the "Principles of Economics," which, applied to present day circumstances, go to show that with societies, associations, councils and the numerous aids to improvement which are in existence, it is possible for back-yard poultry-keepers to assist in making vast strides in commercial pursuits if they will fulfil conditions upon which the success of this industry—as indeed of every other—largely depends.

Of course, the small holder's question stands far apart from the case of dwellers in the town, but looking at things as we may, one can but be struck with the fact that real success in each case depends entirely upon excellence, first of all in the birds themselves, and then in maintenance of vigour and consequent vitality, in order that the best results may be obtained.

I am glad to have had the honour of introducing Orpingtons, because I know as the result of a long

and varied experience among all sorts and conditions of poultry men, that the characteristics I have so successfully combined in the various Orpington breeds are just what are required, not at this juncture alone, but in the future, when even a greater movement in favour of poultry-keeping shall have made it necessary that the very best birds shall be sought out to satisfy the growing demand for fowls that combine a handsome appearance with the utmost utility.

We are living in times when the margin for failure through inefficiency is fast narrowing.

Bungling means loss in these days, and the poultry-keeping of the future must of necessity be profitable, not because of high prices, but because of the good returns which proper management shall bring from birds of these good profitable kinds.

Great and ever increasing opportunities lie within the grasp of enterprising people, and, far and near, because the first principles of success are rooted in excellence! Orpingtons are "Birds for the times, because they possess this more than any other breed."

The working men of the future are likely to possess greater powers and advantages than even those of the present, so the march of events is all on our side.

Professor Marshall has in his wide survey of the working man's position shewn how really success depends upon opportunity, and the character of those

who undertake any work to carry it out. He shews that the lack of capital is not the insuperable obstacle in the way of a really able man or woman that it is sometimes thought to be.

And, indeed, with the poultry-keeping question, abundant opportunity is given to any men or women, however poor, to start and go on successfully, and I am hoping, that as good eggs may now be obtained for a few shillings per sitting, that working men will start, and so go on as to prove poultry will pay, so that throughout the length and breadth of the land a little extra money may bring additional comfor in many a working man's home.

THE ORPINGTON CLUB.

Inception—Prosperity—Divisions in the Ranks—Acrimonious officials—The future of the Club.

SOON after the Orpingtons were first introduced, a few ardent admirers of the breed banded themselves together and formed what has been known as the "Orpington Club."

This Club has doubtless done much to bring the breed more prominently before the public, providing specials at shows, and if the Club had been worked as it should have been, its sphere of usefulness might have been greatly enlarged and much good would have been the result.

A great deal of dissension having crept in, the officials of the Club have had oftentimes great difficulty in so arranging matters that individual members might be pleased and induced to continue patrons of the breed and the organization.

The Orpingtons have, however, left the Club all behind, as the tendency of the executive has been

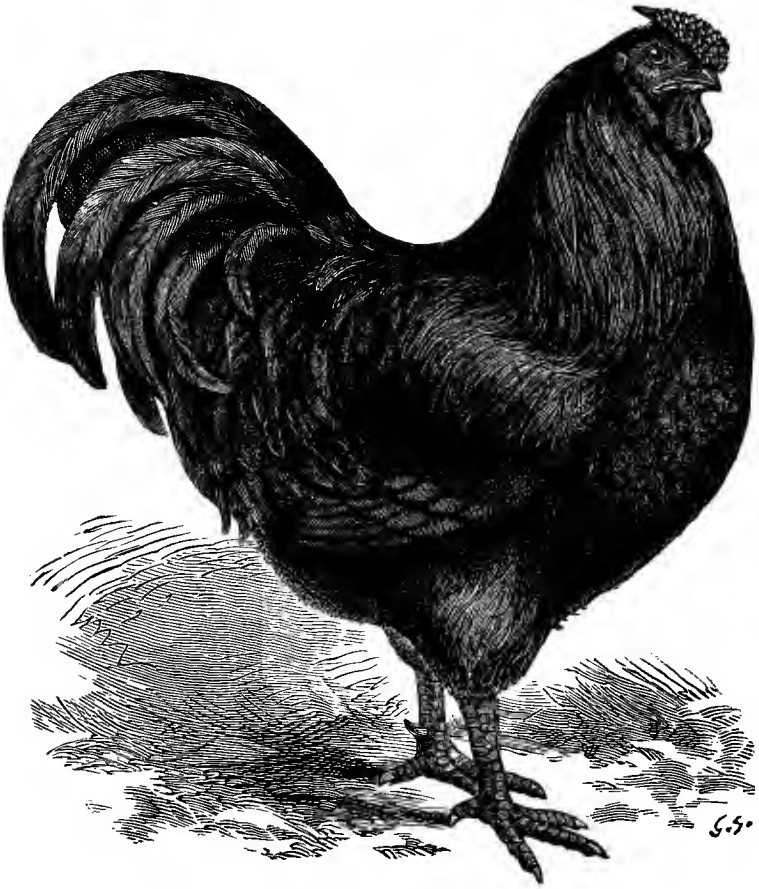
all too cramped and conservative to allow of the Club making much real progress.

The tendency has been to adhere solely to the Black variety, and, of course, this policy is altogether opposed to the comprehensive scheme I have set forth in this book. I have however always striven to work amicably, even with the most unreasonable of those who have seemed to make their connection with the Club a point of vantage from which they might attack almost unceasingly the development of the Orpington breeds.

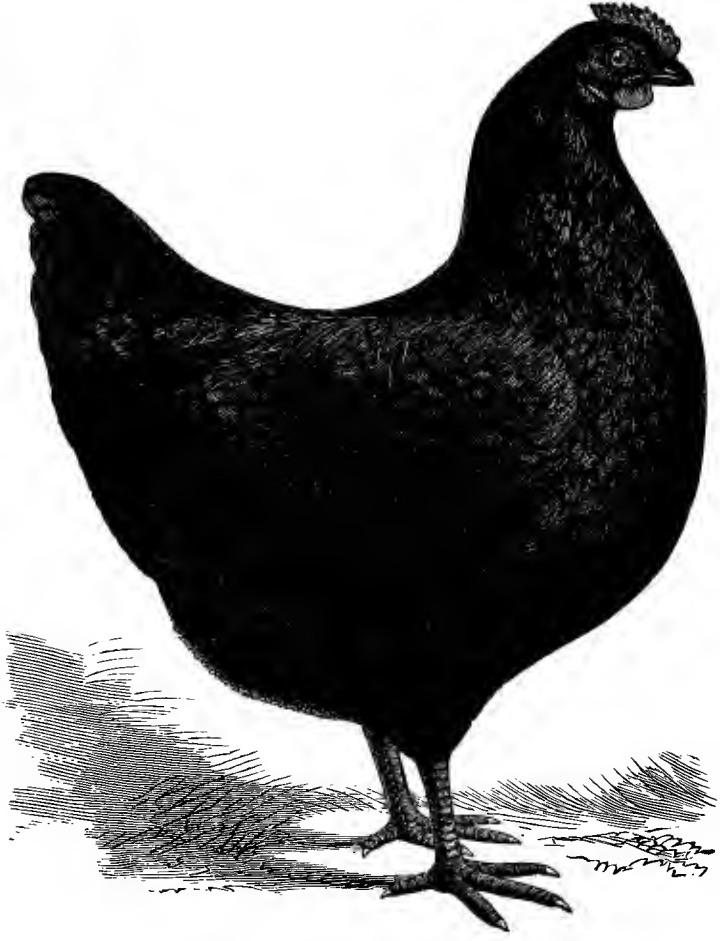
It has been said that no breed is likely to spread much unless it has a club to watch its interests, and also make a good appearance in the show pen.

The White Orpingtons have spread, however, without either of these aids, except, perhaps, the determined opposition which some of the Club members have offered them, which has served, happily, to bring them under the public notice more prominently, and so helped to established their popularity.

The Buffs are spreading faster than ever, so that if the Orpington Club continue to stand aloof from these other good and genuine breeds, the Club must suffer, as the birds themselves will run right over Club, officials and all, and, in the hands of the public, will leave them all behind.



ROSE-COMB BLACK ORPINGTON COCK.



ROSE-COMB BLACK ORPINGTON HEN.

ORPINGTONS IN THE SHOW PEN.

Types—Varieties—Standards—Judging—The Types of the future—Show Orpingtons and utilitarian qualities—Orpingtons must be first-class all round to be good Orpingtons—Orpingtons for all classes of fanciers.

WE come now to a point of interest round which poultrydom has gathered and waged many a war of controversy, ending in many a meed of praise.

The type of the Black Orpington is universally acknowledged to be of the very best for every good purpose, and I have striven to preserve the short-legged, plump, yet massive stamp in all the varieties, and have been remarkably successful in setting this type in them all to a very large extent.

Doubtless, this has done much towards causing the rapid spread of the breed, which has been, indeed, almost phenomenal. This has been due, in some degree, to the violent and, in some respects, virulent opposition of a section of the old time enthusiasts. They, like "The Dog in the Manger,"

would rather waste opportunities than let others, better capable of supplying birds for the times, carry on their benevolent work.

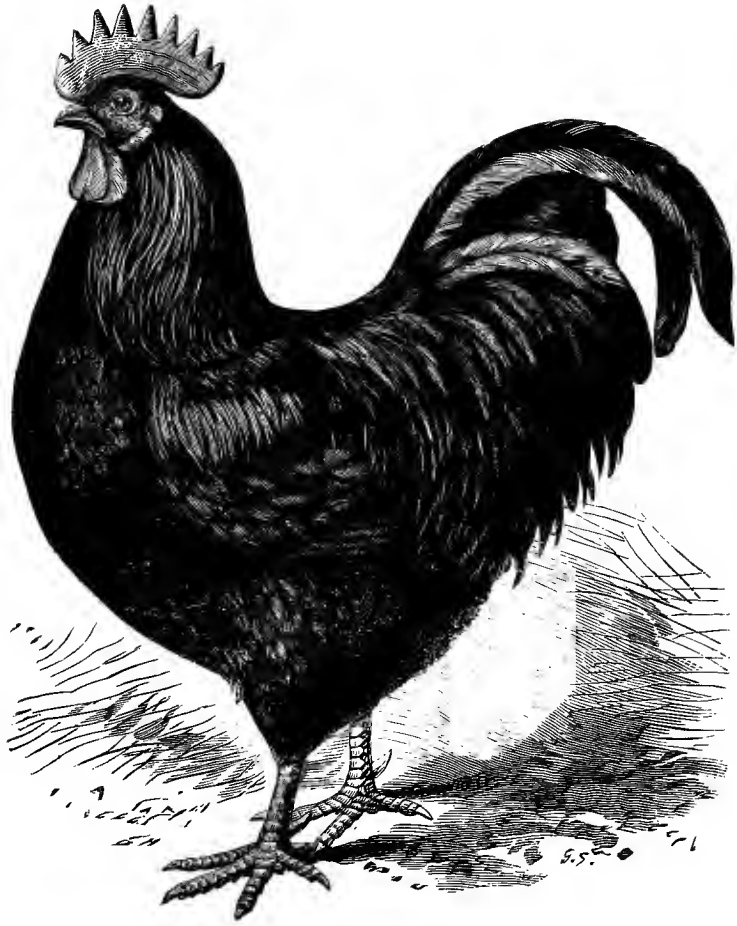
Thus I have found increasingly that not only have Orpington breeds been useful in providing good birds, but their introduction has had a vast educational influence, showing as they have the possibilities which existed before in the industry, and in a proper application of rational and scientific methods of breeding and management.

All the Orpington breeds should be of the same type, with the exception of comb colour, and some minor differences, which are really only points of detail, which would exist in any breeds with several varieties.

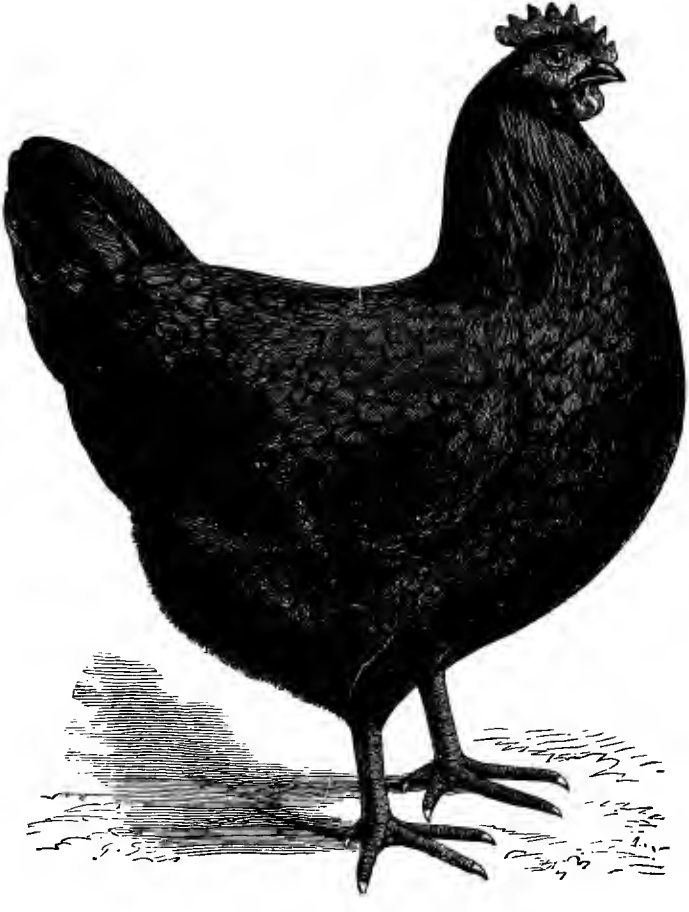
The first variety I brought out was the original Single-Comb Black Orpington. In a future section I hope to show how I made the birds, but here I give only the names, &c., of the varieties.

Following on this, because the public clamoured for a Rose-Comb bird, I introduced the Rose-Comb Black Orpington of the same stamp, but with a Rose-Comb—and equal in every respect to the single.

The White Single-Comb and White Rose-Comb Orpingtons were next sent out, and these birds have taken wonderfully, being white and very handsome. They are most prolific layers, as well as fine table birds, although smaller—in this respect being improved



BLACK ORPINGTON COCK.



BLACK ORPINGTON HEN.

each year, until in 1896 they are nearly equal in type to the fine, massive Blacks, that are so popular as table fowls all over the world. Their white legs and white plumage make them valuable as table birds, and beautiful to behold, although the colour of their plumage is against them for confined runs, getting soiled and dingy with smoke and cinder dust.

The most popular of all, however, is the Buff Orpington, last introduced, and the best appreciated. The same fine stamp of big bodied, good laying bird, healthy, vigorous, active. Both Rose-Comb and Single-Comb varieties are among the best of all the leading breeds of the day, and when, later on, my readers carefully observe out of what material the birds were formed, they will see at once that from three continents the best blood of the most widely known breeds have been thrown together to form these varieties of birds, the equal of which, in the final developments of the breeds, it is very questionable whether the world has ever before seen.

Of course, the birds have been assailed by jealous and often unskilled persons, who, as is the wont of such critics, blamed the breed for nearly everything except their own ignorance. This has been all too sadly apparent by the various stupid assertions which have been mixed up in the effusions in which they have made their uncalled for strictures.

I now proceed to give in detail the standards of

the various breeds, which are, of course, very similar, as I have shewn, because of the uniformity in shape, &c., which I have been remarkably successful in preserving. The Standard for the Black Orpington, as published by the Orpington Club, is as follows:—

COCK.

Plumage.—Black throughout, with a "green" sheen or lustre upon it, free from coloured feathers.

Head.—Small, neat, fairly full over the eye, carried erect.

Comb.—Medium size, erect, evenly serrated, free from side sprigs.

Face, Earlobes, and Wattles.—Red.

Beak.—Black, strong and nicely curved.

Eye.—Black or dark, with dark brown iris, full, bright, and intelligent.

Shape.—Cobby and compact.

Breast.—Broad, deep, and full, carried well forward, long straight breast bone.

Back.—Short, with broad shoulders.

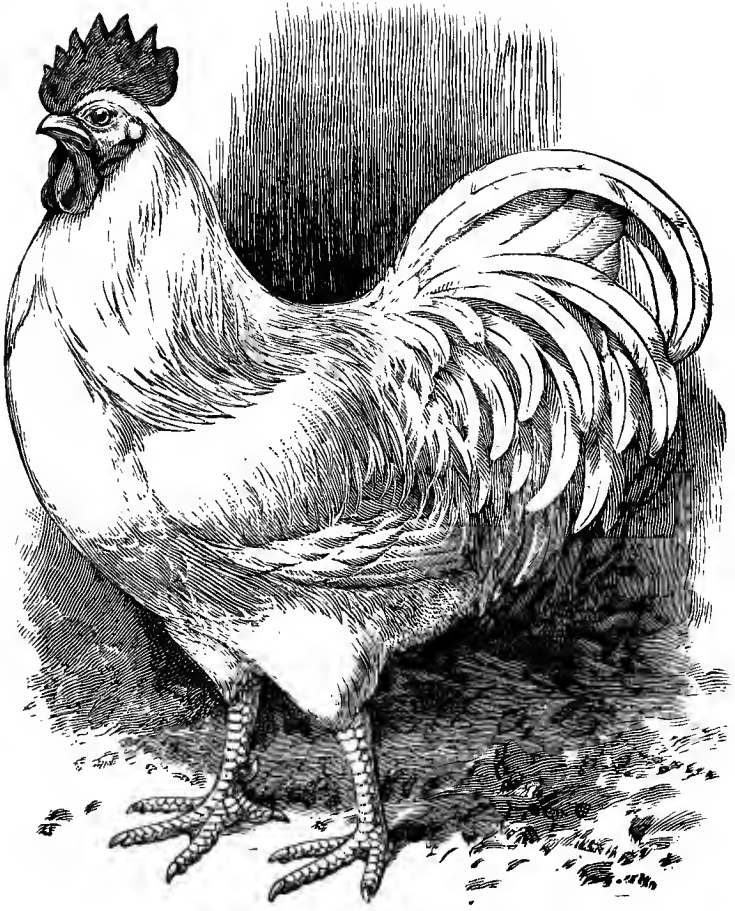
Saddle.—Rising slightly.

Tail.—Medium size, flowing and inclined backward, with good, fine silky hangers on either side.

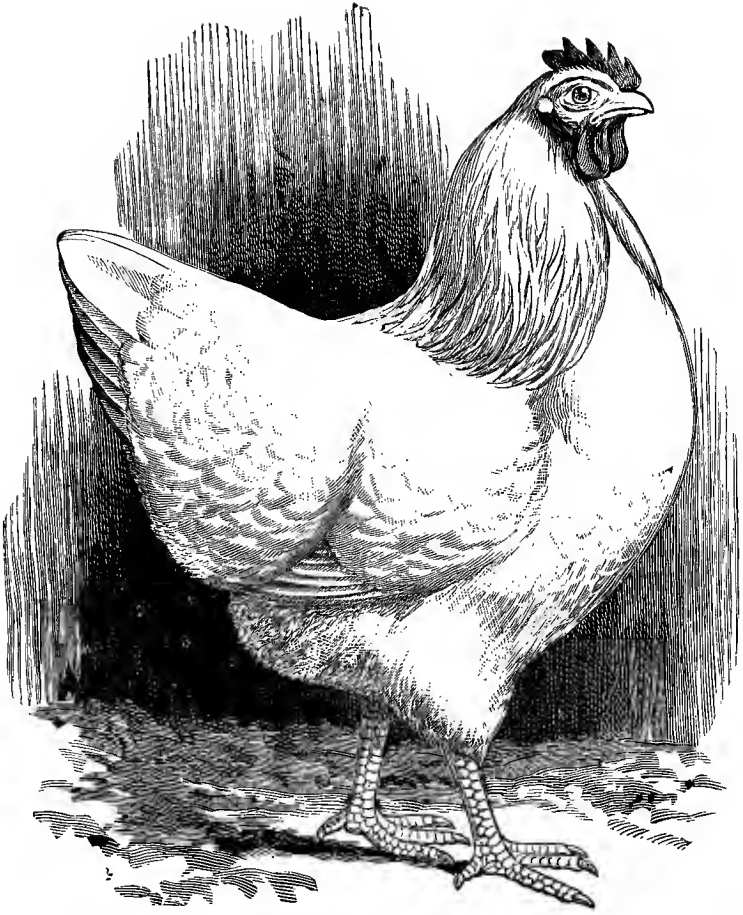
Hackles.—Full, both neck and saddle.

Legs and Feet.—Black, strong, short; four claws on each foot, with white nails; sole of foot white.

Skin.—White, thin, and fine in texture.



SINGLE COMB WHITE ORPINGTON COCK.



SINGLE COMB WHITE ORPINGTON HEN.

Flesh.—White and firm.

Carriage.—Erect and graceful.

Weight.—Between 8 and 11 up to 13 lbs. when fully matured.

HEN.

Plumage, Head, Comb, Face, Beak, Eye, Breast, Legs and Feet, Skin, Flesh and Carriage.—Same as in Cock.

Tail.—Medium size, inclined backward and upward.

Cushion.—Sufficient to give the back a short and graceful curved appearance.

Weight.—About 7 or 8 lbs. and in rare instances up to 11 lbs., when fully matured.

ROSE-COMB BLACK ORPINGTON.

The standard for this variety is exactly as the foregoing single comb standards, with the one exception, which is as follows :—

Comb.—Neat rose, not large, well set to head.

WHITE ROSE-COMB ORPINGTONS.

The Standard for this breed is, of course, very much the same in all points of carriage, shape, &c., the rose comb, of course, and the colour of plumage and legs constituting the only real difference in characteristic points; the pure white plumage and nice white legs being a correction in these birds of some of the failings of some other breeds, excellent in many respects, but failing in these particulars,

SINGLE-COMB WHITE ORPINGTON.

These birds are precisely the same as Rose-Combs, except, of course, the single comb is the distinguishing feature of the variety.

SINGLE-COMB BUFF ORPINGTON.

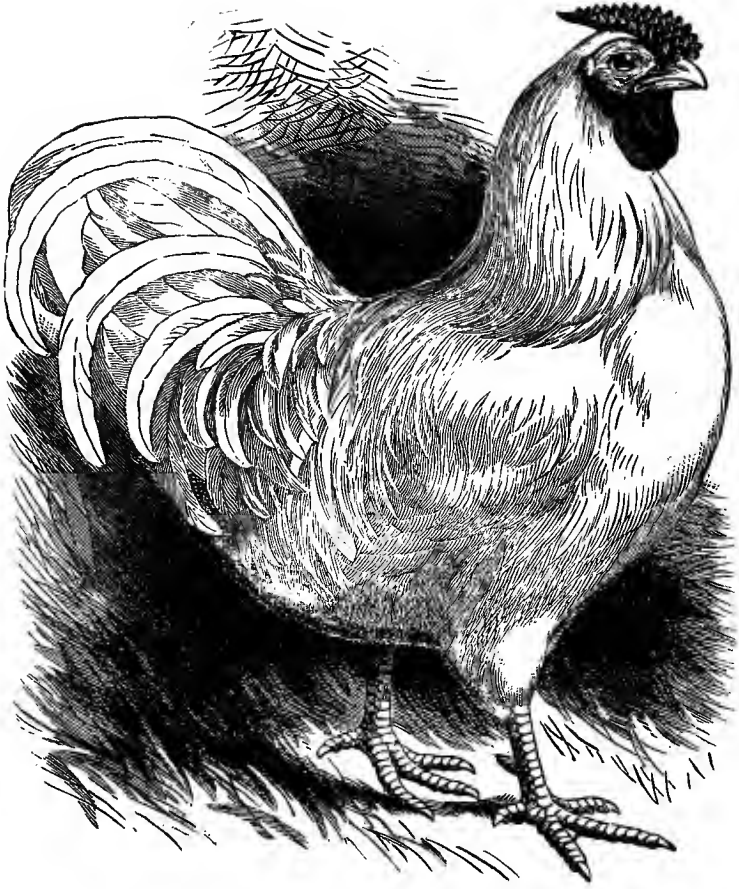
As with the white, so with the Buff, the white legs and beautiful golden buff plumage constituting characteristics which are welcome in a breed that possesses in connection with them so many of the most excellent points of an all round fowl.

ROSE-COMB BUFF ORPINGTONS.

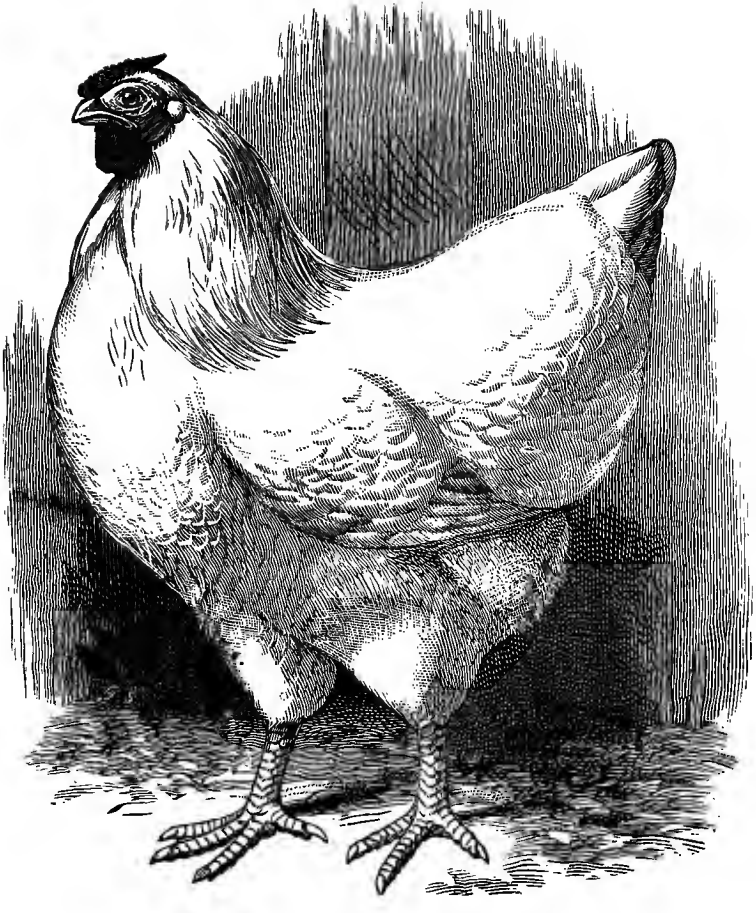
With the single exception of the difference in comb, the upright carriage, massive stamp, and graceful appearance of the finest of the developed Black Orpingtons are all found in these last and most popular Orpingtons, and I am delighted that the type has been so preserved and perpetuated.

My ideal Orpington is a noble specimen of its kind. I am especially anxious to urge upon the attention of all my readers this one fact. There is only one *type* of Orpington to me, Orpingtons, whether they be Black, White, or Buff, should all be of the short legged, broad, deep-breasted stamp of bird, which it is my belief will form the finest of fowls for domestic purposes.

Of course, one of the most important points in connection with showing birds is the judging. The



ROSE-COMB WHITE ORPINGTON COCK.



ROSE-COMB WHITE ORPINGTON HEN.

Orpingtons have been well treated in the show pen, and I feel grateful to the practical far-seeing judges who have done much to encourage the breeding of the most valuable type of Orpington.

I give here the scale of points for judging, and in doing so may say that the scales apply to all kinds of Orpingtons.

POINTS FOR JUDGING.	Black.	White.	Buff.
Plumage and Condition ...	10	20	30
Head	5	5	5
Comb	7	5	5
Face	5	3	3
Beak	3	3	3
Eye	5	5	5
Shape	15	10	15
Breast	10	10	10
Tail	5	3	8
Saddle or Cushion and Back	5	5	
Legs and Feet	5	5	5
Skin and Flesh	5	5	5
Carriage	10	11	3
Weight	10	10	3
	100	100	100

DISQUALIFICATIONS.

The slightest feather or fluff on legs or feet
Yellow skin.
Yellow in legs or feet.
Long Legs.

Thus it will be seen that it is a point in breeding Orpingtons to produce birds of uniform excellence of different colour, and yet all possessing good laying and table qualities.

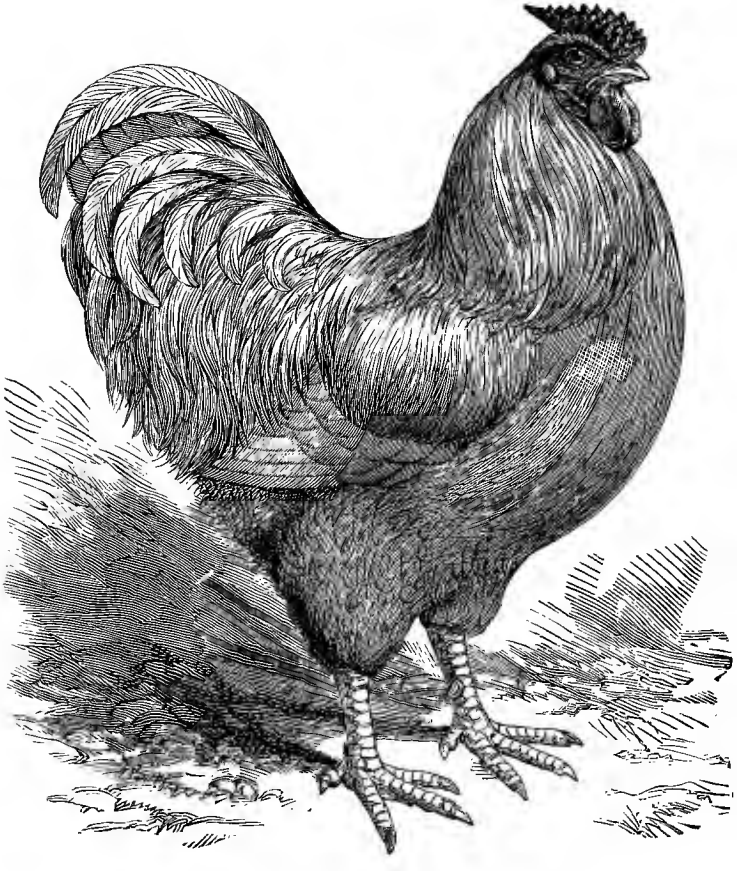
The birds that are likely to live in the future will be the active, useful bird of the stamp I have described.

Poultry-keeping as an industry, must come to the front, and if, under the critical examination of the public eye, its credentials stand the test, the English people will not be slow to undertake the prosecution of so profitable a scheme for infusing new life into Agriculture.

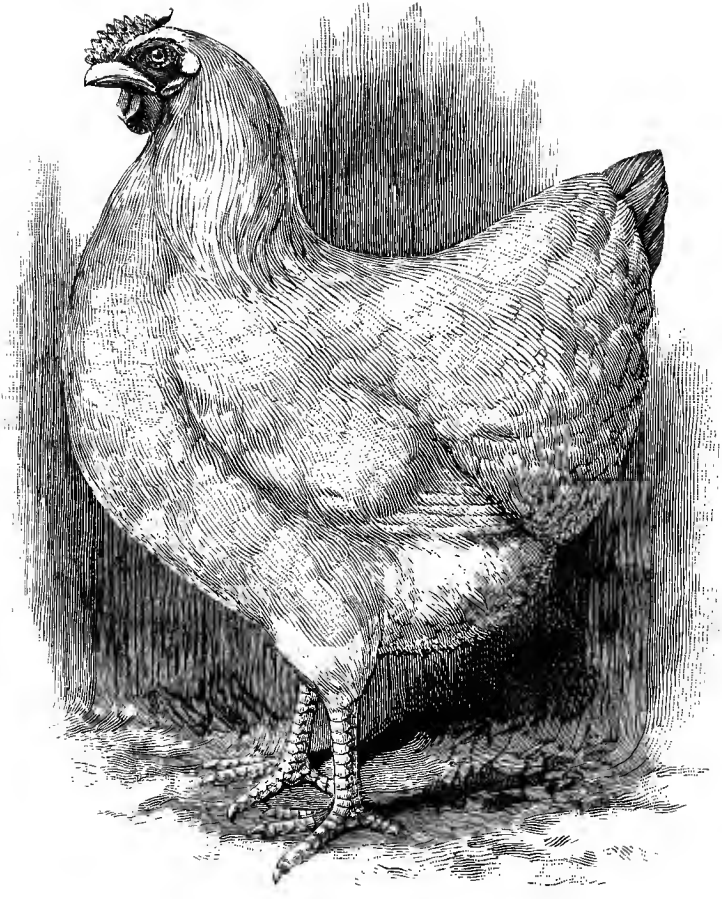
All breeds must be improved and filled with new vigour, while the old useless ones will soon grow extinct, as poultry-keepers, no longer satisfied with partial success, will look out for birds best suited to the purposes of prolific egg production and good table qualities combined.

When the home industry question comes to the front, the English public will turn instinctively to the birds that show the greatest excellence, and it is these good birds that I hope to produce in sufficient numbers to flood the land, and do the much needed work, the necessity for which has so long existed.

It remains yet to be seen what the development of the farmer's poultry question will lead to, but if



ROSE-COMB BUFF ORPINGTON COCK.



ROSE-COMB BUFF ORPINGTON HEN.

fowls live on farms in greater numbers, it will be good, profitable birds that will be the most prized and the most kept, and the hardy, useful Orpingtons will, I believe, take the first position as farmer's fowls, because there are several varieties of them, and the farmers like good, nice looking stock of every kind.

I now approach a question which is of vital importance in connection with all breeds, Orpingtons in particular—as is now the case in some parts of of England where Orpingtons have taken the place of older but less useful breeds. There has been a great tendency always to strive after fancy points to the neglect of utility and excellence.

One of the things we have yet to learn as a fancy is that it is the fowl, not its feathers, that should form the chief value of the bird itself.

Egg production and table qualities we must have, and so with regard to Orpingtons, it is highly essential that, although beauty of plumage and points should always be studied, yet utility must always be kept in the first place if poultry-keeping is to command its proper position, commercially, in our midst.

To ensure this the standard of judging must be based upon real usefulness, and fancy no longer be made the great standpoint, as the utility of fowls should be a proved thing by egg results, and weight

as table birds, so that the judgment might be based upon facts that are beyond controversy.

Of course the future usefulness of the show system must depend very largely upon the turn things take, as it may yet be that the market bench will be the most profitable show point of vantage for enterprising poultry-keepers, but it is wise to utilise every system that has any element of real usefulness in it, in order that all sorts of people may indulge their particular tastes, and exert their own characteristic efforts.

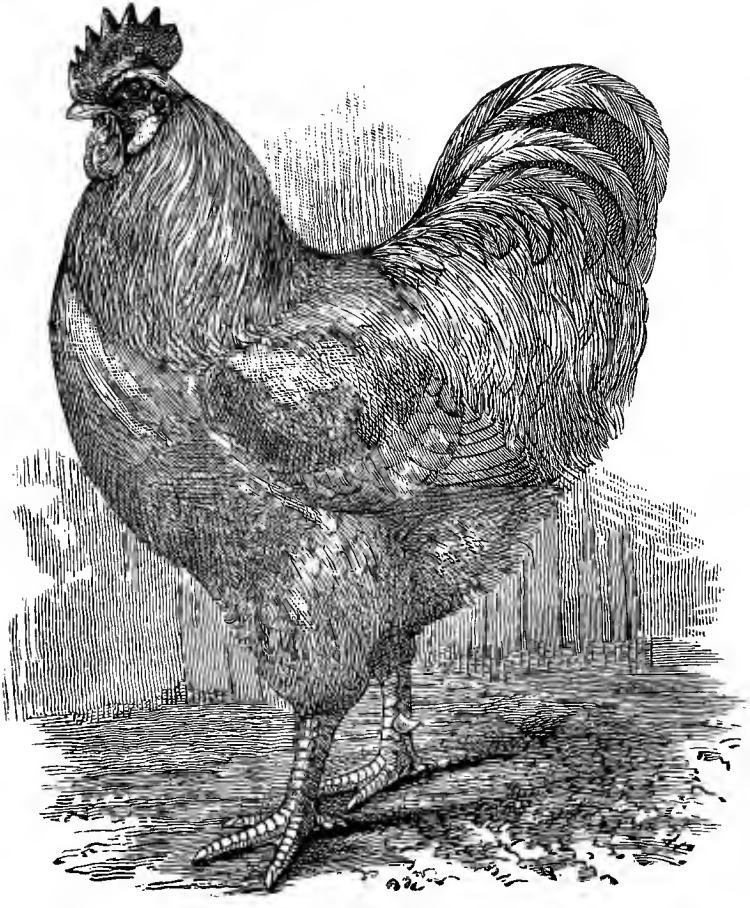
Poultry Clubs would do well if they advocated strongly this utility judging, and in the scale of points for judging larger per centages should be allowed for points of real utility.

It will be seen that in the points for judging the proportions differ, as, in the case of buff birds, perfect colour is more difficult to obtain than either a good black or white.

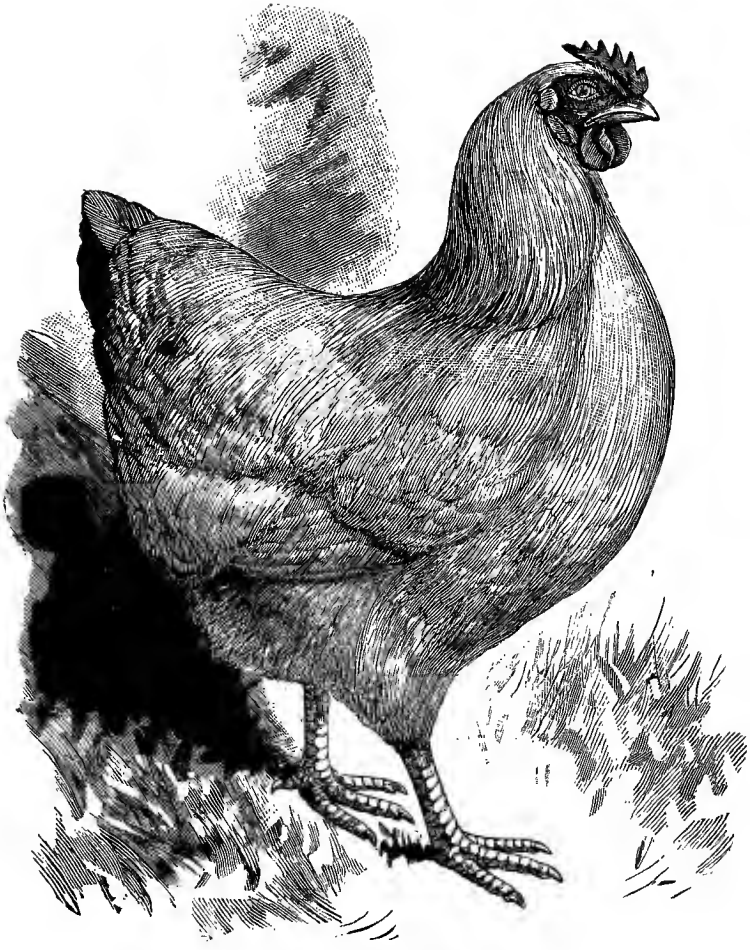
And now let us look at the influence this kind of thing will have upon the types of the future.

Of course the standard of excellence in the show pen governs very largely the types of bird of its own peculiar kind that is bred.

The long lists of "wastrels" have, doubtless, contained many better birds as regards utility than the lists of prize winners that have filled the catalogues of our leading shows, but the wastrels have been off



BUFF ORPINGTON COCK.



BUFF ORPINGTON HEN.

colour or failing in show points, and so have been consigned to oblivion.

If utility were the chief aim many of such unfortunates would have been preserved to do good work in the poultry runs, and we can scarcely estimate the amount of good that would have been done if some of the abnormal birds produced by crossing had been moulded into breeds.

In the future I feel sure the combined breeds, showing good laying and table qualities, will take premier position. The best of these up-to-date breeds will carry the sway, and, therefore, in the Orpington breeds we have what I believe will prove the nucleus of a large flock of the birds of right stamp for future work.

"Not for an age, but for all time" has been written of certain beautiful poetry, and with Orpingtons the range is not so extensive, but in principle much the same, because "A thing of beauty is a joy for ever," and a thing of usefulness is very nearly akin.

And yet it should be possible to produce good, useful birds that would win in the show pen, and if the Orpington Club would only rise to its privileges and opportunities it might establish a principle of this kind in regard to show Orpingtons that would, as the breed spreads, revolutionize show poultry, and give an incentive to profitable poultry-keeping which would never be lost.

I trust I may yet be able to overcome the opposition, the results largely of petty jealousy, which prevails oftentimes in the deliberations of the club, some members of which seem to forget to whom they owe both the Orpington and their existence as a Club at all.

If this body would brook a word of advice, I would suggest that they should lay down as the first condition of success in any special classes in competition for prizes over which they have control, that good Orpingtons are absolutely good birds all round; thus keeping the standard high, they may soon be able to set people who are enthusiastic over Orpingtons to work to produce better and still better specimens of the breed that promises so much for a fair future for poultry-keeping. I do most earnestly crave the hearty co-operation of all competent men and women of the poultry-keeping fraternity in the prosecution of a design which I feel will benefit, in very many ways, the industry we love.

And now, in conclusion of this chapter, I wish to hold out my hand to all classes of fanciers, and ask them, each and all, to contribute their part to the success of Orpington breeding. New breeds are not always received with favour, and very many have deserved little consideration, but in these grand birds I have produced I do feel every confidence that the most expert breeders will acknowledge, if they do

not openly confess, their value, and the importance of the preservation of such hardly earned excellences as they possess, and of their spread throughout the poultry world.

Whether a lover of the lighter breeds, or of the heavily feathered broody birds; whether a fancier of Game, of Bantams, of fancy birds of other kinds; I would appeal to the enthusiasm of all fanciers to join me in this great fight for utility, for while leaving them with their pet birds, doing all I can to help them with these, I do long to send forth, more and more, the birds I feel will far transcend them all in usefulness, and work the greatest good, so that soon on farm, in villagers' gardens, in town back-yard, and grass run of the suburban villa, in wooded knoll, on country hill-side, in valley, smiling and beautiful as in grounds of mansion, and round the lodges on estates, in each and every place where poultry-keeping is available, the fancy we so much love may, in each instance, serve to prove the great truth, and show more and more "How to make poultry pay."

THE PRESERVATION OF THE BREEDS.

Orpingtons will not die out—Fresh blood—Laying Strains—Colouring—Sports—Developments—The Author's watchfulness — Hopes for the future — Orpingtons for the multitude.

"A THING of beauty is a joy for ever," and with regard to Orpingtons I may fairly claim that the birds of these noble breeds are indeed beautiful. The Black, the White, the Buff, all full of vitality and, consequently, resplendent with full, glossy plumage, the good birds of the breed are worthy of a long existence, and have "come to stay."

As I have shown, the great needs of the future are met in these birds, and better than this, owing to the several varieties, it is possible to adapt them to circumstances of nearly every kind, the characteristics of so many breeds being bound up in the birds themselves.

One thing must never be lost sight of, and that

is that fresh blood must constantly be infused into any strain of the birds that may be running together for any length of time. When I formed the breeds, I always took care to have four or five strains unrelated to avoid in-breeding, so that they might go forth to the public essentially strong, and free from taint of disease or weakness, and thus the vitality of the birds has been maintained in full vigour, and their development has been marvellous. This, of course, is a tribute to skilful breeding, and I can only say how thankful I have felt to all those who have in any way assisted the development of these noble breeds, and I hope in the future to join more and more with skilled breeders until the birds are as near perfection as it is possible for them to be.

The Colouring of the varieties is, of course, a very difficult thing to deal with. The Buff presents the greatest difficulty in this respect, but as the years roll on and careful breeding does its work, I trust these difficulties will disappear, and the difficulties attached to breeding Buff Orpingtons will have become minimised.

One thing should be carefully looked after, and that is the "Sports" which sometimes appear. These should not always be destroyed, as I believe this "Sport" principle in breeding is one of those wise provisions of Nature to preserve utility in

birds, &c., so that it is not always wise to spurn these abnormal specimens which are often a breed "in a nutshell" and contain excellences that would found a variety. Skilled breeders will in the future learn to value more and more the "Sports" that are so interesting and, perhaps, in some respects more useful still. "Variety is charming," but variety is charming only because it is useful, and dull monotony is monotonous because Nature's law of change and development accords with the instincts which largely govern our lives, and we must ever bear in mind that likes and dislikes are not always whims and fancies, and these even are not always so despicable as they are represented sometimes to be. Judgment is guided very much by what we like and we like often what we most need. So let us not forget that "Sports" may be more useful than we think.

Of course, as circumstances afford opportunities, the Orpingtons will develop. It is not likely that in every way the Orpingtons of the future will retain every characteristic the birds now possess, but this should be aimed at, since scientific breeding now largely determines the stamp or kind of birds to be produced—even the preservation of the short, compact style of bird that seems so to suit the changeable English climate.

Then the combination of qualities should always

be aimed at, and I would urge especially upon the breeders of the future the great importance of preserving the utility which now attaches to all sorts of Orpingtons. Never let it be destroyed, or the reputation of the breed, founded upon excellence, will surely decline and die out as rapidly as it has arisen, and the "Job's Comforters" of future generations will read the history of their fall, and, if vulgar, will quote "Up like a rocket; down like a stick."

This, however is not possible if the birds are dealt with conscientiously, and the Orpingtons will do their duty if the Orpington breeders do theirs, and each will stand or fall as they endeavour to depart from their first stand point of excellence, and in every way I shall endeavour to preserve this and watch over the interests of breeds that I hope to leave as a memorial of my labours in the poultry world.

My hopes for the future have ever been great. The future of poultry-keeping in England has yet to be seen. As a nation, English people have scarcely touched the fringe of this great question. The good, useful breeds that are now being produced, are, all of them, making it more and more possible for the English working man and small holder and farmer to embark in confidence in an undertaking that has money in it, and I

have every hope that, as a result of enlightenment, I may live yet to see the farms and gardens of my native land full of those feathered pets, that are to me so great a delight and source of profit, and which would to others as well become prized and profitable.

So, then, the future lies all before us, and in an England, possessing boundless resources, and plenty of eager, skilful people, only waiting for employment and means of gaining a livelihood; in these days of "bitter cries" and unemployed, when "In darkest England and the way out," the system propounded is based only on factories and farm colonies, surrounded with restrictions, and tempered with religious bias, and a measure of pauperism, let us welcome the finer opening, and more rational basis of peasant poultry-keepers, spread out before us as a remedy for many ills of circumstance, which are the result of inaction and scarcity of healthy and suitable employment, requiring only the putting forth of energies that may profitably be employed in the work of poultry rearing and fattening for the market.

The name of Lord Winchilsea will long be remembered in connection with his efforts and princely offers of land for the development of co-operative schemes of farming small holdings, and I trust government, aristocracy and democracy will all combine to carry forward any scheme that shall

show the poor and unemployed of our cities a way out of their difficulties, and a means of healthy, happy employment.

And on the bosom of this wave of enthusiasm, I hope to see the Orpington breeds borne to a prominence which shall defy all efforts to detract from their fair fame, and cause their overthrow, so that with one consent the people, whose voice now is the ruling principle of the hour, shall take them up, and proving their excellence when kept in a proper way, shall find they are "Birds for the times," and so realize their value, and gain success by keeping them.

ORPINGTONS FOR CROSSING.

Popular Crosses of the past—Popular Crosses of the future—New breeds: new characteristics—American enterprise and English genius—Orpingtons for combining the excellences of the breeds—Orpington Crosses for Eggs all the year round.

THE whole subject of crossing is one of extreme interest and of the utmost importance. While there is a wide difference between the permanent formation of a breed having distinguishing characteristics, and a cross that is but the temporary amalgamation of breeds and their qualities, yet one is very nearly allied to the other, and very much of the advantage gained by the making of new breeds is also perpetuated and gained even by crossing birds of two breeds together.

Cross breeding in the past has not been looked upon favourably by old school breeders, whose conservative notions have always hindered progress like this, but, in many instances, the more

advanced spirits of their generation have indulged in this to a certain extent, and so many crosses have been tried with good results.

If I may be permitted to give a piece of personal experience, I may say I have learned more of the real value of breeds through crossing than by any other means, and it was while crossing that I gained that insight into the characteristics of the various breeds at disposal which enabled me to choose out the best varieties with which to build up the various Orpingtons which are now so popular.

Some of the older crosses were very imperfect and only partially fulfilled the expectations of those who tried them, the difference between the breeds being all too wide to admit of anything like marked excellence to grow out of their coming together.

Some of the Houdan crosses, as well as the Game and Dorking and Langshan, proved excellent layers or table birds, but, as all the varieties were lacking in concentration, it is not surprising to find that the advantage was not so great as was hoped, and in many respects not so marked as was anticipated.

The new breeds, both American and English, have, however, revolutionized crossing results. Being themselves greatly the results of crossing

various breeds, the concentration of qualities was still further combined in a cross between two breeds of this kind, and so we have in such breeds as the Leghorn-Plymouth Rock and other crosses between the newer breeds, as well as crosses between new and older breeds such as Orpington-Dorking and others—just the very best cross-bred fowls it is possible to produce under present circumstances.

The crosses of the future, however, bid fair to transcend every other. Poultry-keeping is an industry largely progressive, and the future will be the best in very many ways.

While the best of the old breeds will always remain, and, as far as they are useful, do very much to strengthen and build up the new ones—the new breeds will form material out of which many good crosses might be formed.

It must never be thought that crosses are necessarily antagonistic to pure bred fowls. This is not so to any appreciable extent, although some prefer such birds on account of their extreme hardiness and strength of constitution, which makes it easier for the inexperienced poultry-keeper to keep them with good results than even pure bred birds that need more attention and more skilful management. But the proper arrangement of large poultry farms depends very largely upon the aims of the proprietor

in connection with the various breeds of poultry kept.

Cross bred birds will of necessity be to a certain extent a little out of the ordinary, and where properly bred they will often lay when birds of pure breeds will have ceased altogether. This is a great consideration, as where this is the result the eggs so laid will constitute a gain over and above the ordinary profits of the farm, and oftentimes the best profit gained.

So it would be possible to fill up many gaps with such birds, produced in the way I have indicated, so that the science of poultry-keeping will have soon became the science of—"A place for everything and everything in its place."

As I have before observed the enterprise of the American poultry-keepers in the production of new breeds has given a new impetus to profitable poultry-keeping.

It has been observable, however, that very many of the ideas of the more prolific American mind have been taken up and perfected in the mother country, and, indeed, this exchange between the skilled of the nations has been a means of adding new strength and beauty to many a fine and novel idea.

The introduction of new breeds of poultry has been no exception to this rule, and in the future

I am hoping that our English breeders will advance in this matter, until a sensible increase of advantage may be felt by those who are looking round for birds with which to stock their yards and produce poultry and eggs, and so, throughout the known world, the work might go on, until the commerce in good poultry shall become one of the links binding country to country and nation to nation in one grand effort to produce good birds and good profits.

The Orpington breeds are useful in another way. Of course in this transition period, during which poultry-keeping is undergoing transformation, a great many poultry-keepers who have a good stock of birds of the old kind by them, are anxious to avoid the greater outlay occasioned by a clearance of the old stock entirely; so in many instances farmers have adopted a plan I advocated some years since of turning down an Orpington cockerel with hens of the barn door type, with the object of improving the birds.

The result has been a large increase in the numbers of eggs laid and a marked improvement all round; shapely good birds being produced, free from disease and the weakness consequent upon rapid deterioration.

So where good mongrels have been kept and have done well, the Orpington cockerels have

worked wonders, confirming every good point, and introducing many others, so that not only have the excellences of the breeds which have been used to build up the Orpington been introduced, but the good qualities of the older birds have been retained and in some instances improved by the introduction of fresh blood.

So we see the influence of the Orpingtons upon the farmers' old fashioned fowls, and it would be well just to turn to another side of this question to consider the influence of Orpington crosses upon egg production.

Producing eggs during the winter months is essentially a feature of the new and modern poultry-keeping.

Whatever the old school breeders were able to do they could never hope to produce eggs in any number during the winter months. Egg production was therefore looked upon as well-nigh contemporary with the fruit and corn harvest, but modern methods have made it possible to produce eggs all the year round.

Orpingtons are famous winter layers and will doubtless improve as their greater vitality enables them to stand against the cold bleak winds and changeable weather of our climate.

This is, of course, no inconsiderable feature in poultry-keeping, as when eggs are most scarce and

the prices highest, then eggs are the most valuable, and, of course, selling as they do at higher prices, helps to counterbalance most effectually any loss that may have been occasioned through slackness at any part of a season.

When it is remembered that where pure Orpington cockerels have been used the pullets have laid at six months, often commencing before and laying on longer and later than the old fowls, it will be seen that Orpingtons when used judiciously might be used to ensure eggs all the year round. Since the Orpingtons came out the pure birds have laid at four months, and some have brought home a brood of chickens at $5\frac{1}{2}$ or 6 months old.

ORPINGTONS FOR MARKET.

Market requirements—Orpingtons for Hucksters—Orpingtons for Table—Orpington game crosses for excellence and white flesh—Failings and how to overcome them—The run of the markets—Salesmen and Orpingtons—Farmers and fowl prices—Incubators for market hatching—Past failures; present hopes; future victory.

THE requirements of the English markets are very simply stated and easily summarised. They might be reckoned up in two words, viz.: numbers and excellence.

Good poultry finds a ready sale in some quarters, especially in the London Markets, which supply dealers that contract for clubs and the better class hotels and restaurants, where the best prices are obtained for the best poultry.

I want my readers to follow me carefully while I endeavour to state some of the particulars in which our English Markets suffer, because of the lack of really good English poultry, which is felt by the salesmen, who would gladly sell out the home

reared birds, if only these could be obtained in numbers sufficiently large to ensure a good supply. This is at present, however, not possible, and a large increase in the number of small producers is necessary before anything like a sufficient quantity of either poultry or eggs could be produced to meet the ever increasing demands of the British public.

To ensure this, therefore, the way must be made for the opening up of modes of production by which many more may be allowed to benefit through the profits of the industry, and I have often felt, as I have thought of the markets glutted with foreign produce, and so empty of English reared birds, how sad it is to think that English people should suffer privation when so profitable a source of employment is at hand.

I am thankful to think farmers are fast awakening to the fact that this question demands their earnest consideration, but not half enough interest is shown in the actual undertaking of anything like a suitable number of birds, which could be kept to the best advantage upon many of the farms that are fast growing idle.

True, from Surrey and Sussex, and the lower parts of Kent, large quantities of fattened poultry are sent to market—in one village called Heathfield, 20 tons per week during the year are sent to London Markets, and 46 tons in the busiest season, but these

form only a speck in the ocean of the necessity which exists for a thorough and practical system of poultry raising for market in this country.

The old system has, of course, been that of the collection of the birds for markets by "hucksters" or "higglers"—men who go round buying up the marketable fowls, and acting as middlemen between producer and market, or poulterer.

These men have been quite familiar figures in country districts for many years, and are a remnant of the old easy going past, altogether behind the times, and not helping the cause by anything but just their buying up of any likely birds at the lowest possible prices. Farmers have been content to go on dealing thus, and so the poultry have been bought up and disposed of by these men, who have reaped a handsome profit oftentimes when the birds have been good.

The hucksters are not slow to recognise the merits of Orpingtons as table fowls. They go round buying up birds in the Lincolnshire districts where the farms lie far apart, sending the poultry into Liverpool, Manchester, Nottingham, and the London markets.

Very large numbers of birds are sent to the London Markets from Boston, in Lincolnshire, so that sometimes when one goes into the market they are asked whether Boston or Surrey fowls are required.

Some people prefer the Boston fowls, the great difference being that the Surrey fowls are fattened by a process of cramming, and the Boston very frequently are not, and some think the Boston fowls taste better than the others, as they are not forced and are of a natural flavour. Personally, I prefer Surrey fowls, and many others, I think I might say the majority of people do, and these birds make 6d. to 1/6 more in the London markets. Dorkings sent from Boston to the London markets at same age do not make as much by 1/6 to 3/- a head sometimes. Surrey fowls of the same age and breed as Surrey crammed fowls, often make 6/- a head, and if exceptionally well fattened from 6/- to 9/- per head, and in very rare instances even in 1896 I have know Surrey crammed Dorkings fetch £1 a couple in the London Markets.

Boston fowls of other breeds will sometimes fetch 3/- or 4/-, while Surrey fowls, of the same age, will fetch 4/6 to 6/- per head at the end of May. Autumn hatched chickens would fetch from 6/- to 7/-. These would be chickens hatched about September or October,—the very cream of those produced.

Of course, the hucksters are men well versed in the requirements of the market and the persons consuming the birds he buys as he goes his rounds from farm to farm and house to house.

There have always been difficulties with regard to market fowls of certain breeds that have yellow skins and black or coloured legs. White skins and legs are greatly preferred, and consequently the Black Hamburgh and Black Minorcas, good as they are for egg production, are not so profitable for table birds; and, of course, the Black Orpingtons—good laying and table birds as they are, fail in this respect; but when we come to the Buff and White Orpingtons, the fine massive forms and light or white legs, gradually overcome every difficulty, and we get an ideal table bird which also possesses fine laying qualities, and hucksters that are willing to give 3d. a head more for the black birds bred from Orpingtons, are still further pleased to get the white, so that in places where 4/o each has been paid for the Black birds, the Buff and White birds should fetch even more.

Buff Orpingtons are great favourites with the Lincolnshire hucksters, because they have the white legs of the Dorking, are fine massive birds, and where the birds have been used for crossing, all have acknowledged that both the pure and cross-bred chickens are the best they have ever had.

Of course, for many years the Lincolnshire farmers have been content to go on breeding the old Lincolnshire Buffs, and these birds have done well on the bleak exposed farms, and damp

soil, so that they are justly popular with all classes of breeders because they have done well in places where other birds would have died. But when the fine Buff Orpingtons made their appearance the old prejudice in favour of Buff birds was met, and the pullets were laying six weeks before the time, the Lincolnshire Buffs were producing eggs, and so averaged from 35 to 55 eggs more per bird than the birds of the famous old breed: this I found to be the case, when I examined the egg records in some of the Lincolnshire districts.

In Sussex and Surrey the Buff Orpingtons are used very much for turning down in farm yards and with mixed lots of fowls, for improving the laying and table qualities, and these have done good service in this direction, and where birds are not perfect specimens, these, which of course do not make such high prices as the better birds, are very useful for the purposes mentioned, and are used largely by poultry keepers everywhere for improving their stock, as they can be bought at a low price and are as good as the best for that purpose. From 8/6 to 12/6 each are often paid for really good birds, and farmers and others have done very well by using them as they have, because the pullets have laid before they were six months old and go

on for a long time, so, improving laying and table qualities, better birds altogether are produced.

The Game varieties have always been noted for table qualities, but the dark skin-legs have never been so well got rid of as by the crosses with Buff and White Orpingtons, as these birds bring out all the best characteristics of the game, and at the same time bring offspring with white legs and skin.

This is a great consideration, as failings of this kind are better got rid of, and the Buff Orpingtons have opened up the way by which these objections may be removed.

The run of the markets indicates the taste of the public, and when we read the high prices birds of a certain kind produce, of course it becomes apparent just how it is that salesmen and others, who have to do with this branch of the business, are anxious to meet with birds that will best answer their customers' requirements, and with Orpingtons the salesmen have been delighted always; the different varieties so well adapting themselves to market requirements as to fetch such good prices.

Of course it is a greater pleasure for these men to sell good birds, and also to please their customers, and it is not to be wondered at that they have hailed the advent of the Orpington breed with delight

And the farmers too, of course, find the better profits just as acceptable.

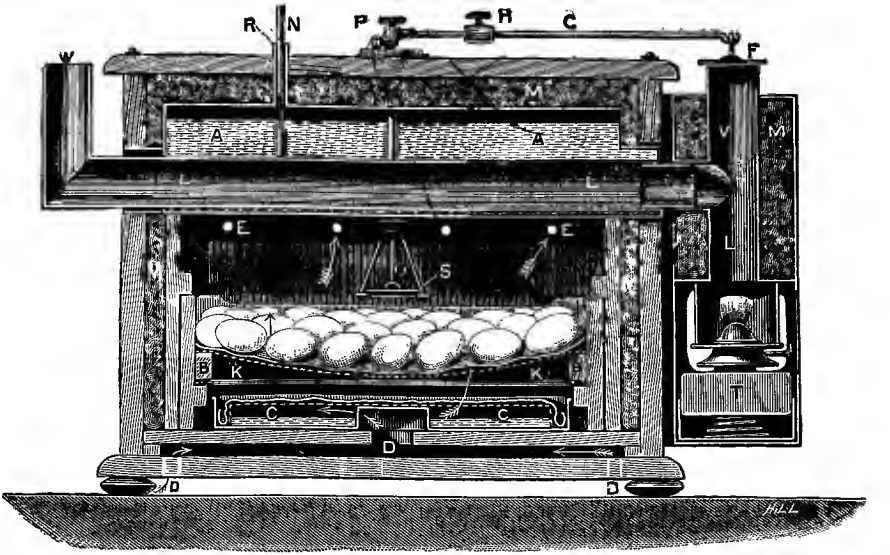
It must always be remembered that the farmer's profits depend very largely upon the sort of birds he keeps, as bad birds eat largely and yield little return, so that birds that lay earlier, keep on longer, and at the end are finer table birds, are, of course, the very best breed to keep for the purposes of profit and augmenting the income of the farm.

In the past bad results have disgusted farmers, and led them to esteem lightly the advantages to be gained, and so it has been an arduous undertaking to convince these men that poultry may be made profitable if only sufficient care is used in the management and breeding, and so, as I look upon Orpingtons as one of the farmer's best hopes for the future, I am always glad when I am asked to look over the farmer's books and read the figures which tell of improved results and greater profits.

And now I turn to a question which largely affects the new poultry management. Of course artificial incubation must oftentimes be resorted to if the birds for winter laying and table purposes are to be ready when wanted.

I have asked Mr. Hearson, of Regent Street, London, to give an illustration of one of his splendid Incubators, the best machine of its kind that I have met with up to the present.

Farmers and others should be very careful what they buy in the way of Incubators, because so



HEARSON'S CHAMPION INCUBATOR.

SECTIONAL DRAWING SHEWING INTERNAL ARRANGEMENTS.

AA, Tank of Water; BB, Movable Egg-tray; CC, Water-tray; DDD, Holes for Fresh Air; EE, Holes for Ventilation; F, Damper; G, Lever; H, Lead Weight; KK, Slips of Wood; LLL, Lamp-chimney and Flue-pipe; MMM, Non-conducting Material; N, Tank-thermometer; O, Needle for Communicating the Expansion of Capsule (S) to the Lever (G); P, Milled Head-screw; R, Filling Tube; S, Thermostatic Capsule; T, Petroleum-lamp; V, Chimney for Discharge of Surplus Heat; W, Chimney for Discharge of Residual Product of Combustion.

many that are worthless are foisted upon ignorant and unsuspecting poultry keepers, who think an incubator is an incubator, but learn by sad experience that these machines differ largely. In a future Edition of my "Poultry Breeder and Feeder" I intend taking up this question of Artificial Incubation, and I hope then to give information that would not be in place in the present volume, dealing, as it does, more especially with considerations of facts, and not so much imparting practical imformation as to details of this description.

And so leaving behind the dark past let us press forward to future victory, and as each development of the new management unfolds itself, let each heart gain increased confidence until disabilities disappear and a happier Agricultural England is the ultimate result of our efforts.

ORPINGTONS AS RICH MEN'S FOWLS.

Plumage suitable—Appearance grand—Variety is charming—Grass runs for Orpingtons—Orpingtons, the table birds of the future — Poultry-men and Poultry-women and Orpingtons.

RICH men in all ages have loved beautiful things, and it has often come as the result of increased opulence that a man has risen to heights of tastefulness which never, until he was in a position to indulge his fancies, were suspected in his character.

Rich people are fast awakening to the fact that their money will buy good profitable birds, just as in the old days only birds to look at could be obtained, however much was paid for them, except in very rare instances.

Of course the old Silver Dorkings and other fine old breeds were in existence, but they were often only just kept and not bred for utility at all, so that the results were often not good.

With the Orpingtons, rich people have confessed themselves delighted, especially in the case of the white variety, which is so lovely. The various colours make Orpingtons peculiarly pleasing to those who indulge in fancy fowls, and the rich and great have not been slow to aver their preference in many cases for these noble birds that are doing so much to fill up the gaps in the poultry ranks of our country.

The white Opingtons look so very beautiful when kept on nice green grass runs, their white plumage rendering them ideal birds for this purpose, and where gentlemen—as some do—keep them for running on the meadows and parks, round their houses they grow increasingly delighted with their magnificent appearance.

But it is their value also as table birds that has caused the fame of the Orpingtons to grow. Fine massive birds, fine grained and fattening well, the young cockerels and older birds are ideal table birds, and when fed and managed properly, no breed is more valuable for this purpose. So handsome birds and profitable may be found in these breeds that form such useful additions to every stock of poultry to which they may be added.

And so in the poultry yards, which most people of position have at their country seats or as part

of the dairy farm, the Orpingtons have brought new life and vigour, and the stock has been greatly improved by the addition of so many good laying and fine table varieties, which produce birds that, with less care, produce better results, and thus Black, White, and Buff Orpingtons have been received with favour everywhere.

In many of the best poultry and dairy farms of England these birds have been introduced by rich men who are wise enough to get the best for their money.

And, in conclusion, I would add a word as to the value Orpingtons have been to a class of men and women who hold positions in which real quality is of the first importance; I mean the poultry-men and poultry-women who are responsible for the poultry reared for the tables of their rich masters.

Positions of responsibility and oftentimes of great difficulty—these people who hold them are not always living under the happiest circumstances.

I have often received specimen fowls and letters asking for advice from some poor troubled soul who could not satisfy the master or mistress with the quality of the poultry produced.

Sometimes too tight flesh and at others not firm enough. Size, whiteness of skin and flesh, all these points are called into question, and some fastidious

or purse-proud master fancies his poultry is not equal to a neighbour's.

Orpingtons have done much to help such men and women out of their difficulties, and I have been thankful to know that in many a stately home these birds are found first favourites among the table birds which are brought to the master's table.

I trust this may continue to be so, as there is plenty of room for improvement in all departments of poultry-keeping, and what I most desire is to see a great increase in the numbers of excellent birds reared, so that foreign producers shall no longer outdo our home farmers and poultry-keepers in the production of the best table poultry and the fat capon.

ORPINGTONS A BREED NOT A VARIETY.

Breeds—New Breeds—American Breeds—English lethargy—Foreign breeds and reception by English breeders—"A Prophet is not without honour, save in his own country and in his own house"—Hardiness, comprehensiveness and excellence—Orpingtons will rule the Poultry world, as "Britannia rules the waves."

THE questions which the great awakening in the ranks of poultry-keepers have called forth, were slow in coming to the point of breeds. Even the most enlightened breeders of the old school had never attempted any improvement in the real build, and stamp, and propensities of the old breeds, so that domestic poultry was only preserved and not often improved.

When I first resolved to form the Orpington breeds, I looked round for the most suitable material, which were birds which possessed good laying and fine table qualities, and were most full of vitality and strength of constitution. I have in the early chapters of the book shewn why I

believe in my foundation theory, and also Mr. Darwin's acquiescence in the principles I have demonstrated the truth of in producing the Orpingtons, and I will, in this chapter, endeavour to show how I proceeded upon these lines to produce, as far as possible, an ideal set of breeds that should do great things for the poultry-keepers of the present and future.

The first variety of the Orpingtons was the Black. To make these, I took a good Black Minorca, which variety are extraordinary layers, black plumage, but small and not putting on fat readily, with white flesh and skin of fine texture, but with black legs, and tremendous activity. They are not suitable for cold, bleak situations, as they are not strong, hardy birds. The points I hoped to procure from this breed were black plumage, red face, and large comb and ear-lobes.

I procured the finest bodied cocks of the breed that I could find throughout the country, that had red earlobes. These "sports" had been killed or thought little of before, because they had not white ear-lobes. With these Black Minorcas I mated some Black Plymouth Rock pullets, which are "sports" from the American speckled Rocks, owing to the Black Java having been used in the making of the Plymouth Rock breed.

Plymouth Rocks are hardy birds—Winter layers

of a brown or tinted egg, and were thought a good deal of when they were introduced, although their yellow skin and legs have always been against them as table fowls in this country.

These varieties when crossed, produced even black pullets and good shaped birds. The cockerels came of a mixed straw colour and were of course useless for my purpose.

With these beautiful pullets I mated a good Langshan of the old short-legged type, and, as is well known, these birds are extraordinary Winter, and particularly late Autumn, layers of deep brown shelled eggs. They lay when eggs are scarce; more so than at any other time of the year. They are also fine bodied black birds, showing an iridescent metallic green sheen upon their magnificent plumage.

So these birds, with their long deep breastbone, and white skin and flesh, infused many good qualities into the breed.

The feathers down the legs had to be disposed of, and to do this, I sought out all the Langshans that were produced without feathers on the legs. These Langshans laid earlier than the feather-legged ones, and with their breasts curved in that peculiar way which denotes strength of constitution and their fine qualities, they soon set their stamp of real excellence upon the birds. So with the

"wastrels" from the good breeds I formed the Black Orpingtons, using birds that represented the poultry of the three continents, viz.:—Minorcas from Europe, Langshans from Asia, and Plymouth Rocks from America—and three varieties that were looked upon as three of the best for general purposes that England possessed. And the Orpingtons have now been tried and found most valuable birds in the coldest and bleakest parts of America and England, Russia, Holland, and all parts of Germany, so that with Africa, India, Australia, Malta, New Zealand, Norway, and America, Orpingtons have now spread to nearly every part of the civilized world. In the most trying hot climates, where other birds have died, Orpingtons are thriving and doing well.

The Rose Combed Black Orpingtons were next introduced. Some people objected that the single combed birds were so like Langshans, and so taking advantage of the fact of a few sports from the Langshans being produced with rose combs, by substituting a rose combed Langshan for a single comb, the Rose Comb Black Orpington variety was formed.

It is very strange, yet quite true, that these "wastrel" birds possess greater vigour than even the varieties from which they sprang, so that the Orpingtons have gained immensely in every way

by being bred from such a source.

The White Orpingtons came next—about 2½ years after the Blacks had gone out to the public.

I had made many experiments to find out the best method of producing white fowls that were up-to-date.

I began by crossing White Leghorn cocks with Black Hamburgh hens, and the pullets from this cross came everyone white, and with four toes on each foot.

I next used a Rose-comb White Dorking cock, mated with the offspring, and some of the birds came blue, some barred like Cuckoo Dorkings, and it was several years before I could produce white birds; and even now occasionally some will come with coloured feathers on them, and the White Dorking blood is seen sometimes when a five-toed bird is produced.

So, with careful breeding, the White Rose-Comb Orpingtons were made into a breed, which produces quick growing, vigorous birds, with good laying and table qualities, and, strange to say, although I have never pushed them forward, or put them into the show pens, yet they have taken wonderfully, and poultry-keepers have found them to lay more eggs than any other white breed. 245 and 250 eggs each a year some splendid specimens have produced, and others have laid 190 eggs in the same time.

They are splendid table birds, have white skin and legs, and this is a point with English people, although in America yellow skin and legs are not objected to.

Then the Single-Comb White Orpingtons were produced by using a Single-Comb White Dorking instead of the Rose, a Rose-Comb being practically a freak of nature and not natural to any bird, and these birds have improved wonderfully, and will, in succeeding years, become increasingly popular, laying, as they do, cream or tinted eggs, and possessing fine laying and table qualities.

Buff Orpingtons are essentially birds for the times, because we are living in times when people are especially pleased and taken up with Buff birds.

The old Buff Cochins had a wonderful run in England, owing to their taking colour and splendid Winter laying. The feathers on their legs were always against them as domestic poultry, as these got dirty, and also rendered them inactive, owing to scaly legs and sore feet, which were often the result of the birds scratching, by which the feathers on the feet were strained and became sore, this extending to the leg tendons with which they are connected.

Birds crossed with Buff Cochins were also very popular, being early layers and growing out into fine birds.

The Buff Orpingtons were made with three varieties, which are quite distinct from those which formed the Black and White.

The first, Golden Spangled Hamburgh Cocks, the biggest and finest I could find, these I mated with Dorkings. The reddish brown progeny I found were by far the best layers of this cross, and, having selected the best layers of these, I mated a Buff Cochin Cock with them, and about two out of every dozen came with clean legs.

By careful breeding I have been able to get five distinct strains, and these fine birds, which combine the qualities of all three, being tremendous layers and fine table birds, are now as popular as any breed that has ever existed, being hardier and less subject to disease, as well as laying beautiful brown eggs, which are more valuable, as I have shown, in market and often in home. The broodiness and leg feathering of the Cochin is bred out, and these lovely buff birds are fast winning their way among poultry-keepers everywhere. After 8½ years spent in their production, and now at the end of 10½ years, I feel abundantly repaid for my exertions as I watch the marked success which has attended my efforts to enrich the poultry world with good and useful breeds.

Rose-Comb Buff Orpingtons are produced by using a Rose-Comb Dorking, instead of a single, although the five toes would, of course, have to

be reckoned with; as are also a few imperfections such as black in hackles and tail, which are fast disappearing as scientific breeding copes with each difficulty that arises. So many poultry keepers are disappointed with breeds they have kept, but I have never heard of an unprejudiced poultry-keeper who treated the birds properly who was dissatisfied with results obtained from Buff Orpingtons.

Of course, the subject of new breeds is one which has not yet assumed its proper position in our midst. The time was when natural things governed the incidents of life, but now the engineering skill and science of modern times have made it possible for many natural hindrances to be overcome, and objects of wonder in the old days are now some of the influences that conduce to scientific success. When the new American breeds were first introduced, the old breeders attacked them, but very soon, as we have shown, the poultry keeping public took them up in real earnest and their popularity increased to an enormous extent, and deservedly so, for their good qualities were a great and marked improvement over anything that had before been known in English poultry circles, and so the enterprise of the American aroused the poultry people of the old country from their lethargy and lack of interest in a most profitable pursuit.

But after the first outburst of prejudice these new breeds were accepted and their virtues extolled, as truth brought these indiscreet grumblers into a better frame of mind, and I had hoped the first fit had cured these mistaken men.

But when my Orpingtons first appeared, all the old rancour and, if anything, a worse outburst of nonsense hailed their introduction, until I had to meet arguments as foolish as they were spitefully ingenious, and as harmful as they were erroneous. Not satisfied with that, men of whom better things might have been expected, constantly assailed me with personal invective and insult. They sought to damage my reputation, and through mine the reputation of the birds. How far they have succeeded is seen to-day. These insults have neither harmed nor discouraged me, indeed I feel it increasingly true that "A prophet is not without honour, save in his own country and in his own house," and that jealousy and prejudice were more responsible for the very stupid assertions many people made, and I only pity where I dare not attempt any other sentiment than that of the most supreme contempt. I was prepared for opposition, as my friends objected when I talked of my project that there would be prejudice against any breeds produced on English soil.

I had tried 70 crosses of various kinds, crossing and recrossing varieties, and I knew that better birds even than the new American varieties might be produced, and I set myself to work knowing what I was about, seeing one to ten guineas paid for specimens of the new American breeds, I thought English breeders might just as well earn the money and many of them are doing so to-day. I took care to provide against weakness or deterioration by keeping several pens of each sort so as to keep unrelated strains, as inbreeding is always detrimental and produces many bad results. So when about ten years ago I put a pair of Orpingtons in the "Not for Competition" class at Birmingham and the Crystal Palace, and many said they were just the stamp of bird that was wanted, I felt I was on the right tack.

This soon became apparent, as after these exhibitions I had enquiries for upwards of £2,000 worth of birds from all parts, even from New Zealand, Australia, Africa, and America, and especially throughout England. About two years after, when the old breeders saw they were being taken up, they began to write against them, and this was the best thing that could have happened, as at every show people were asking for them and were delighted with them, and soon orders for eggs, &c., were given, and the birds spread rapidly

on their merits throughout the world, and especially among farmers, who found that the eggs fetched from 5/6 to 7/6 per dozen for sitting, and this was new to men who had before sold eggs 20 a shilling.

Of course it was impossible for me to supply all these birds at once, but in 1887 I bred a large number of young birds and these were eagerly bought up, and soon, in many parts of the country, the birds became quite familiar objects and valued in every poultry-yard they were found in.

The rapid success of the breed awakened the avarice of many unprincipled people, and a great deal of trickery was practised, and many astounding stories of duplicity and fraud reached me, but I have sought always to be honest and fair, and to produce the best specimens of the birds possible.

And now, as my book is fast drawing to a close, I will say just what I feel ought to be the outcome of the introduction of these Orpington breeds.

I have endeavoured to show in the pages of this book that Orpingtons should combine excellences, be hardy, strong, prolific, and fine table birds, so that in the fierce competition for first place in market, shop, or house, the Orpington breeders may hold a foremost position, and help to sway the destinies of the poultry interest on the side of usefulness and excellence.

Of course, much has yet to be accomplished before an ideal poultry-producing England can be seen, but the days are fast coming when the markets will be filled with English poultry and the many ideas now put forward for the emancipation of the farmer from his sad condition, will have become perfected and bring forth fruit in fairer systems of production, and more profitable systems of disposal, and first and foremost of those factors which shall work this beneficent charge will be the Orpingtons—Black, White, and Buff—which shall rule the poultry world as "Britannia rules the waves:" peaceful, and withal a reign of usefulness, until poultry-keepers in all parts of the world shall have found it easy to keep Orpingtons, and through keeping Orpingtons, easier to make poultry pay

THE AUTHOR'S GREETING AND THANKS TO THE POULTRY WORLD.

Career—Kindness of Friends—Enmity of jealous old breeders—Vindication of position—The majority rules—Agree to differ—Let actions and facts speak plainer than words.

AND now the end has almost come, and the last chapter of my book begun, and my mind naturally reverts to the circumstances which have led me, up to the present, to become an enthusiastic poultry-keeper and breeder.

Very early in life I became a lover of poultry, and learned much while tending a neighbour's birds, although my parents would never allow me to keep any of my own.

I grew up to manhood, and through all the circumstances of my life I always carried a love for the feathered tribes, until at the time I began my public career in the press and on the platform, I had gathered a vast store of real facts, got, many of them, by patient observation of birds under all sorts of circumstances. I have contributed to the

poultry press from the very commencement, and in all parts of England, and in some parts on the Continent, I have lectured for County Councils, and proprietors who have been anxious to help their tenants, and in every way have sought to advance the interests of poultry-keepers, until now, at the very head of the fancy, I feel that I am but beginning to fathom the vast resources of the industry.

Of course the sympathy and assistance of many kind friends have been to me a source of encouragement and help in many trying moments, and to one and all I extend my heartiest thanks, and ask them to still help forward the work of producing good profitable birds.

To those whose enmity has pained me, I would be as generous as possible. I have cared little for their abuse, and have quoted to myself a thousand times, "Nothing succeeds like success." I have proved to the poultry world that I could give them good useful breeds, and I am prepared to stand by my first position still, and feel increasingly proud of the birds of which this book is first a history, and secondly a summary of the uses they may best be put to; and in spite of the opposition of the few, the vast majority of enlightened poultry-keepers claim them as their best hopes for the future.

Of course, to all honest foes I can only extend my hand and agree to differ and go on to prove by facts—which are better than fancies or theories—that poultry will pay, and that Orpingtons are the best allround birds of the times. The boundless future that stretches out beyond the struggling present calls us to renewed effort and strong enthusiasm to hasten forward, grasping opportunity, and making success our own; and for the present I shall work, and if I may but succeed in firmly planting the industry in my native land in the position I conceive it ought to occupy, please or offend as I may, I shall do my honest best, and for the rest—

"I hear the roll of the ages."

THE END.

THE

POULTRY JOURNAL:

How to make Poultry Pay.

EDITED BY WILLIAM COOK.

PUBLISHED BY

E. W. ALLEN, 4, Ave Maria Lane, E.C.

THIS is a Monthly Paper, and is the only monthly journal in England which is devoted entirely to Poultry. In each number there is a chapter of Hints for the current month, according to the season of the year, showing how to manage both the old and young stock, &c. Also short chapters on ducks, turkeys, and geese, and their management, &c., when kept in small runs. Questions are answered through the columns of this paper, and also free by post by enolosing a stamped and addressed envelope. Post-mortem Examinations are made on all kinds of Poultry, for the nominal sum of 2s. each. All specimens for examination to be sent, carriage paid, to 105, Borough, London, S.E. The Reports appear in the Monthly Journal, and in cases of urgency, if a stamped and addressed envelope is enclosed, they are answered by post. In cases of contagious disease, a letter of instruction is sent free of any other charge. Specimen copy of the journal sent free of charge. Special Columns for Farmers and Children.

ORPINGTON HOUSE, ST. MARY CRAY.

PRICE, TWOPENCE PER COPY.

Postal Subscription: Three Months, 7½d.; Six Months, 1s. 3d.; Twelve Months, 2s. 6d., payable in advance.

PRACTICAL

POULTRY BREEDER

AND

FEEDER:

OR,

HOW TO MAKE POULTRY PAY,

By W. COOK.

NINTH EDITION, PRICE 2/9, POST FREE.

Fully revised to date with many illustrations and portrait of the Author.

35,000 COPIES IN CIRCULATION.

Every Poultry-keeper should have one, as the book treats fully on the General Management, Diseases, Rearing and Breeding of Poultry, Selection of Good and Bad Layers, and Hints on commencing Poultry Farming, &c., &c.

OPINIONS OF THE PRESS.

Practical Poultry Breeder and Feeder; or, How to Make Poultry Pay (by William Cook).—The idea of likening poultry unto machines for converting waste and worthless matter into very good and profitable delicacies, is a happy one, and the author explains it very thoroughly. With little labour and attention, fowls may be kept so as to yield a good return: but there are conditions which must be observed, and these are simply and plainly laid down by the author, who is the most careful instructor we have met with for a very long time.—*Daily Chronicle.*

Practical Poultry Breeder and Feeder; or, How to Make Poultry Pay (by William Cook).—We are perfectly sure none who follow the plain instructions given will fail to keep poultry at a profit.—*Glasgow News.*

Cook's Practical Poultry Breeder and Feeder.—Mr. Cook says that poultry may be likened to machines for converting waste and worthless things into good and profitable delicacies. Much good poultry food is, no doubt, thrown in the hog-tub, or otherwise wasted. How to turn many things to account may be found in Mr. Cook's valuable manual, which is full of practical knowledge of all kinds of fowls and their management. Poultry breeding and keeping not only *may be*, but *it is* profitable when carried out on the system recommended by Mr. Cook.—*Land and Water*

How to Make Poultry Pay.—This is the title of a practical work on poultry breeding and feeding, by Mr. William Cook. It is especially adapted for cottagers, or those having limited accommodation for keeping poultry, and the author has been successful in his endeavour to impart plain and practical information, which will be of service to the amateur poultry breeder, and enable him to make it a profitable pursuit. —*The North British Agriculturist.*

Mr. Cook in his useful little book, *How to Make Poultry Pay*, remarks that the number of eggs annually imported by this Country is about 750 millions, worth (say) £2,400,000. As is generally known, the majority of these eggs come over from France, where they are produced by cottagers and farmers, nearly all of whom keep fowls, and make them pay well. Mr. Cook thinks that if our cottagers and farmers would only devote themselves to a little practical study of fowls and their rearing, at least one half this sum of money could be kept in this country. A friend who followed Mr. Cook's sensible advice was able to increase his store of eggs from 400 to nearly 800, without, at the same time, adding to the number of his fowls.—*Society.*

How to Make Poultry Pay (by William Cook).—Mr. Cook points out so many facts concerning the numerous errors universally made, either through ignorance or prejudice, about poultry, its rearing and breeding, that the little manual deserves to be widely dispersed. It has often been said that the English working-classes might be much better off than they are if they only knew how to take advantage of things, as do the French, who in reality are exceedingly poor, but at the same time very frugal, and admirable in their perfect knowledge of domestic economy, often knowing how to live comfortably on what their English fellow labourers throw away. Mr. Cook's book however, has a wider scope than that of teaching *poor people* how to keep poultry. It addresses itself equally to the rich, and so practical are the hints it contains that one gentleman by following them managed to increase his store of eggs in one year from 1,800 to 2,300, and yet he did not add to the number of his fowls. He simply punctually obeyed Mr. Cook's rules for dieting his poultry, and the result was such as greatly to surprise and delight him.—*The Morning Post.*

Poultry Breeding and Feeding.—So much has been written of late years in connection with the subject of this little work, that one feels disposed to doubt whether there be anything that is to be told. Mr. Cook, however, takes up the subject in a somewhat different spirit to that of most writers.—*Journal of Horticulture.*

The Practical Poultry Breeder and Feeder. By W. Cook.—The book abounds with useful information requisite for the management of poultry with a view to profit as well as pleasure, the information being explained in a thoroughly practical and simple manner.—*Norwood Review.*

Practical Poultry Breeder and Feeder; or, How to Make Poultry Pay. By William Cook. The ninth edition, re-written and revised to date.—This would enable anyone who had little or no idea of poultry "to keep fowls and make them pay well, thus combining pleasure and profit, both in town and country." (Orpington House, St. Mary Cray, Kent.) —*Newcastle Daily Chronicle.*

Practical Poultry Breeder and Feeder ; or How to Make Poultry Pay. By William Cook. Ninth edition, re-written and revised to date.—A very complete and plainly-written manual for those who wish to keep poultry and to combine in so doing both pleasure and profit.—*Literary World.*

A Ninth edition of *The Practical Poultry Breeder and Feeder*, a useful and well illustrated manual for those who wish to know the ways of fowls and profit by them, has come from Mr. E. W. Allen, London. The author of the work is Mr. William Cook, who has increased its value in this edition by a thorough revision and addition of some new matter.—*The Scotsman.*

Practical Poultry Breeder.—Many people would like to know "how to make poultry pay; still more, perhaps, would like to know how to manage fowls for amusement or domestic purposes. Such persons may be glad to hear of a little book under the above title written by WILLIAM COOK, an expert in poultry raising.—*Gardeners' Chronicle.*

Poultry breeders should welcome the appearance of a new edition of Mr. William Cook's *Practical Poultry Breeder and Feeder* (E. W. Allen) Ave Maria Lane), as the many valuable directions on management, feeding, &c., contained in the work cannot fail to prove serviceable to all who keep fowls, whether for pleasure or profit.—*Graphic.*

Practical Breedcr and Feeder. Published by the author, William Cook, Orpington House, St. Mary Cray, Kent.—Those who had the pleasure of perusing Mr. Cook's valuable work when it made its appearance a few years ago, will not be surprised to learn that it has run into the ninth edition. But though the present issue is styled a ninth edition, it is to all intents and purposes a new book. It has been re-written and brought fully up to date. Everything of special value that appeared in former editions has been retained, and a variety of new matter, rendered necessary by the altered state of things under which we live, has been added. The book in its new form, should therefore be of exceptional interest to breeders and rearers on poultry, whether for fancy or for the market. The growing importance of the latter point has not been over-looked by Mr. Cook. For the guidance of those who would give attention to this matter the author imparts a deal of useful practical information which should assist the poultry-raiser in making it a profitable pursuit. The most suitable class of houses, the best system of breeding, feeding, and rearing, are all dealt with in detail; while several valuable hints are given as to the selection of the best pure

breeds for crossing. The best poultry for egg-producing and table purposes are indicated, and altogether the work should commend itself to all who are interested in the question of poultry-raising, which is receiving increased attention every year. Mr. Cook's book comes up to its title in a much fuller degree than any other work on the same subject with which we are acquainted.—*North British Agriculturist.*

Cook's Poultry Breeder and Feeder: or, How to Make Fowls Pay.—Mr. Cook's success not only as a writer about the history of poultry and the points of the various breeds, but as an instructor and example how to manage breeds to make them pay, is generally acknowledged. As this is a ninth edition it is plain that the public only require to be told that the book is "in print" once more.—*Live Stock Journal.*

Practical Poultry Breeder and Feeder; or, How to Make Fowls Pay. By William Cook. Ninth edition revised to date. London: Published by the author.—The writer of this handbook makes hens and eggs his business, farming them himself at "Orpington House," St. Mary Cray, and going up and down the country to help others in doing the same by lectures and advice. So far as we can judge the book seems sensible and useful.—*Liverpool Mercury.*

Poultry Feeder and Breeder.—There is no work better known and appreciated than this work of Mr. Cook's, the ninth edition of which, re-written and revised to date, we now welcome.—*Bell's Weekly Messenger.*

The Practical Poultry Breeder and Feeder; or, How to Make Poultry Pay. By W. Cook.—Unlike many writers on Poultry and their management, Mr. Cook is a large breeder himself, and has spent many years in making experiments with most kinds of poultry. His writings should be more valuable on that account. The opening chapters of his work have the most interest for ordinary poultry-keepers, as they contain general directions for breeding and feeding.—*Farm and home.*

W. Cook and Son, Orpington House, St. Mary Cray.

DUCK BREEDING AND REARING MADE SIMPLE.

NEW EDITION.

DUCKS: AND HOW TO MAKE THEM PAY

BY W. COOK.

PRICE, 2/6; POST FREE, 2/9.

The pages of this book are full of useful hints, and plain and practical information. No duck rearer should be without one. The useful varieties are fully dealt with, and illustrated, and everything connected with ducks fully explained How young Ducks can be got to a greater weight without a pond, &c., &c.

Address—ORPINGTON HOUSE, ST. MARY CRAY.

THE HORSE:

ITS KEEP AND MANAGEMENT,

BY W. COOK.

PRICE, 2/6; POST FREE, 2/9.

Chapters on Feeding—Watering—Tying up and Bedding down in the Stable—Cleaning—Clipping and Singeing—Horses' Feet—Bandaging and Managing Horses in the Stable—Colds—Diseases—Shoeing—Breeding—Rearing Colts—Breaking in—Driving—The Stable Floor—Fever in the Feet—Weak Joints, &c.—Illustrated.

THE POULTRY-KEEPER'S ACCOUNT BOOK

BY W. COOK.

The most complete method published.

This book is so arranged that it can be commenced at any time during the year.

PRICE, 1/-. POST FREE, 1/1½.

PHEASANTS, TURKEYS & GEESE

By W. COOK.

PRICE, 2/6. POST FREE, 2/9.

This is a practical book, treating on the subjects very fully, and should be read by all lovers of these birds, and by those who have a little ground at their disposal.—Illustrated.

Address—

W. COOK & SON,
ORPINGTON HOUSE, ST. MARY CRAY.

W. COOK & SON

SUPPLY

STOCK BIRDS

From over Forty Different Varieties of Fowls, also Ducks, Turkeys and Geese for

Exhibition, Pure Breeding or Crossing Purposes.

———— :o: ————

INSPECTION OF THE POULTRY FARM INVITED.

———— :o: ————

All Birds are sent on approval to any part of the country on customer paying carriage both ways if Birds are returned.

If not approved of birds should have fresh straw and be fed and watered and returned at once.

Pure bred birds of all varieties can be supplied all the year round either singly, in pens, mated, or large numbers. Hens or Pullets from, 7/5, 8/6, 10/6, 12/6, 15/6, 21/-, 30/-, £2 2s. to £6 6s. each. Cocks or Cockerels, unrelated, 8/6, 10/6, 12/6, 15/6, 21/-, 30/-, £2 2s., £3 3s. to £8 8s. each. Birds for farm-yard purposes at low prices. Cross-bred Pullets, 5/6 and 6/6 each. Special prices given for Birds for Exhibition purposes. Foreign orders executed. Send for our full Price List of Birds, Eggs, and Poultry Specialities, Post Free.

W. COOK & SON,

ORPINGTON HOUSE, ST. MARY CRAY, KENT.

BIRD TESTIMONIALS.

DEAR SIR,—I beg to forward a cheque for your bill, and to say the Black Minorca chickens arrived safely, and I am very pleased with them

Yours truly,
(LADY) SYBIL KNOX

Messrs. W. Cook & Son,
Orpington House, St. Mary Cray, Kent, England.

DEAR SIRS,—I am in receipt of yours dated 30th December, and note you received money and despatched goods. Very many thanks, for hints *re* Buff Orpington hen. You will be pleased to hear she is all right, and is laying away. I have a nice lot of chicks, and all are doing well. I am more than pleased with them. Yours, 4th January, also to hand, and note contents, and very many thanks for your honest and straightforward reply *re* White Leghorns. I had my doubts with reference to them, and suspected the White Minorca had been freely used with them. Very many thanks for your kind offer of a Buff Cockerel. But you can bear this in mind with my next order, which I think will be for ducks, will see later on. But, my friend, I would rather have given £5 more for Leghorns, I wanted the best. I will now send to America for White Leghorns. Your explanation quite satisfactory. Will you believe me my Leghorns are in a nice cool shed, seldom see sun, and their legs are quite white. They are fine birds, admired by all; but the remark, I thought, White Leghorns had yellow legs is a "dunner" to me.

I send you a paper to-day, tell me what you think of it? You will see I make no secret of a good breeder's name. I am proud of good birds. I hope my testimonial will bring you more to your mill. Kind regards, and very many thanks for your kindness.

Yours faithfully,
S. S. NOSWORTHY.

W. Cook & Son.

DEAR SIRS,—Herewith please find cheque for 15/- for the two drakes you sent us. We are very pleased with the birds in every way.

Yours truly,
M. HEAL.

MRS. COKAYNE has received the Buff Orpington hen, and is much pleased with it. She encloses a Post Office Order for 15/- in payment.

W. Cook & Son, Orpington House, St. Mary Cray.

MISS LANSLOTTE, encloses one shilling's worth of stamps in payment for the box the drakes came in, and begs to inform Mr. Cook she is much pleased with the birds.

GENTLEMEN,—Fowls to hand last evening. I am very pleased with same. Shall return your crate as soon as possible.

I am, yours truly,
ERNEST CHEESMAN.

DEAR SIR,—The game cock arrived quite safely, and I think him a very satisfactory bird. I am sure to get white legs from him, for many hens have white legs. I hear that there is to be a "class" for white leg—black—red—Old English Game. If so, I can supply them from a very old cock-fighting strain. I returned the case yesterday.

Faithfully yours,
W. F. COLLINS.

Mr. Cook.

Messrs. Wm. Cook & Son,

GENTLEMEN,—The Buff Orpington Cock and three pullets were duly received this morning, with which we are highly satisfied, and thank you for your prompt sending of same.

Empty box returned per Midland Railway.

Having remitted you £3 yesterday, on receipt of invoice, I await receipt of same. Again thanking you.

I am, yours truly,
CHESTER TAYLOR.

Orpington House,
St. Mary Cray, Kent.

MRS. BOWSTEAD has received the Orpington Cock safely, and is much pleased with him. The case will be sent off early tomorrow.

HORSES.

W. COOK & SON also breed a good many Horses—Cobs, Hackneys, and Hunters. Good reliable animals only are supplied, and if any fault should exist this is pointed out when being offered for sale. If Ladies or Gentlemen requiring animals would let Mr. Cook know their requirements he would at once tell them if he has animals to suit them.

PRICE LIST OF EGGS FOR SITTING.

ORPINGTONS.

W. COOK & SON are the originators of these birds, which are now known in almost every part of the World, and are recognised as the best all-round fowls we have. They are excellent Winter layers and good table birds combined.

They have been most successful in showing these birds, and since January, 1893, up to July, 1896, have won several Cups, 40 Specials, 25 Medals, 280 First, 170 Seconds, and 50 Thirds.

The best Black Orpington Eggs at 21/- per sitting are laid by prize and cup winners shown at the leading shows. The second are 10/6 per sitting, from winners at small shows, with good laying qualities combined. The others are 6/6 per sitting, from birds bred specially for laying, being selected solely for this purpose.

The Black Rose-combed Orpingtons possess the same qualities as Orpingtons, but have rose combs. The eggs from the best birds, prize winners at large shows, are 21/- per sitting, those from winners at small shows, 10/6 per sitting, and those from selected layers, 6/6 per sitting.

White Orpingtons are quite different to the black varieties, they are splendid table fowls with white legs, and extraordinary layers. Poultry keepers who have once tried them like them very much. Eggs from the best birds are 15/6 per sitting, those from specially selected layers, 6/6 per sitting.

Buff Orpingtons. This new variety surpasses the Blacks for laying and table qualities. They are beautiful buff birds, with white legs and skins. Eggs from the best pens of Buff Orpingtons are 21/- and 10/6 per sitting. The birds are all mated so as to produce good and large stock birds. W. Cook and Son have no less than 20 pens of these birds unrelated, and those poultry keepers who want sittings of eggs from unrelated birds can have them if they will state their requirements when writing. Eggs from Rose-comb Buff Orpingtons, same prices as the single.

W. COOK & SON won with this handsome variety in their classes at Birmingham Show, December, 1895; one Cup, two Firsts, two Seconds, and two Third prizes, besides prizes at many other shows.

Eggs can also be supplied from the following pure breeds, prize strains with laying qualities combined at 10/6 per sitting, having won over 800 Prizes, Cups and Medals.

Golden Wyandotte
Plymouth Rock
Black Minorca
Partridge Cochin
Buff Cochin
White Cochin
White Leghorn
Brown Leghorn
Buff Leghorn
White Wyandotte
Buff Wyandotte
Buff Rocks
Langshan
Silver Wyandotte
Black-breasted Red Game
Indian Game
Silver Grey Dorking
Dark or Coloured Dorking
Light Brahma
Dark Brahma
Redcap
Scotch Grey
Malays
Black Hamburg
Houdan
Andalusian
Black Rose-comb Bantam
Silver Sebright Bantam
Black-breasted Red Game Bantam
White Rose-comb Bantam

Eggs from the following pure breeds, but bred especially for laying, at 6/6 per sitting.

Plymouth Rock
Golden Wyandotte
Black Minorca
Partridge Cochin
Buff Cochin
Andalusian
Langshan
Dark Brahma
White Wyandotte
Buff Wyandotte
Buff Rocks
Red Caps
Light Brahma
Silver Wyandotte
Black Hamburgh
Brown Leghorn
Buff Leghorn
White Leghorn
Dark or Coloured Dorking
Silver Grey Dorking
Scotch Grey
Black-breasted Red Game
Indian Game
Houdan
Silver Sebright Bantam
Black Rose-comb Bantam
White Rose-comb Bantam
Black-breasted Red Game Bantam

Eggs from the following first crosses at 5/- per sitting.

Houdan-Leghorn
Houdan-Orpington
Houdan-Plymouth Rock
Minorca-Langshan
Orpington-Brahma
Plymouth Rock-Brahma
Houdan-Minorca

Indian Game-Dorking, a splendid cross for the table, 5/6 per sitting. All from selected first cross hens, mated with fine Buff or Black Orpington cockerels, 4/- per sitting. Indian Game-Buff Orpingtons, 5/6.

W. COOK & SON, ORPINGTON HOUSE, ST. MARY CRAY, KENT.

Duck, Geese, and Turkey Eggs.

DUCK EGGS.

	s.	d.
Prize Aylesbury	15	6
Aylesbury	7	6
Prize Rouen	15	6
Rouen	7	6
Pekin	7	6
Rouen-Aylesbury	5	6
Pekin-Aylesbury	5	6
Aylesbury-Indian Runners	5	0
Indian Runners from selected birds	8	6
Indian Runners from grand layers	6	6
White Runners from selected birds	10	6
White Runners from grand layers	6	6

GEESE EGGS.

W. Cook & Son have some of the finest Geese in England, of all kinds.

	Per Egg.	*Per sitting of* 11 *Eggs.*
Chinese ...	2 0	... 1 0 0
Italian ...	2 0	... 1 0 0
Embden ...	2 0	... 1 0 0
Toulouse ...	2 0	... 1 0 0

TURKEY EGGS.

	Each.		*Per sitting of* 12 *Eggs.*
From large birds and good layers.			
American Mammoth Bronze	2 0	...	1 1 0
Cambridge	2 0	...	1 1 0
From magnificent Prize birds of both breeds	2 6	...	1 7 6

W. COOK & SON have about 5000 *stock birds for breeding purposes, which are all kept on large grass runs. Those requiring reliable eggs from well bred birds and excellent layers can ensure having them from them.*

Twelve eggs to a sitting, all guaranteed fertile. All unfertiles replaced if returned carriage paid, to Orpington House, St. Mary Cray, with a note in each box, giving address of sender and full particulars.

W. COOK & SON,

Orpington House, St. Mary Cray, Kent.

EGG TESTIMONIALS.

DEAR SIR,—Thank you for sending the eight Orpington eggs, and also the Orpington cockerel which arrived safely this morning. He is a very fine bird and I am quite satisfied with him.

Yours truly,
HELEN REYNOLDS.

MISS A. E. DANIEL begs to thank MR. COOK for the sitting of Andalusian eggs he sent her about a month ago, and to say that 10 chickens hatched out of the 12 eggs, which she considers very good.

DEAR SIR,—I thought you would like to hear what success I have had with the last sitting of eggs.

Hatched out in an Incubator 10 chickens, very healthy and strong, I am pleased to say doing well.

I remain, Dear Sir,
Yours truly,
S. ROBSON.

To Messrs Cook & Son.

RINGS FOR MARKING POULTRY.

W. COOK & SON can supply Rings for this Purpose. Metal Rings, with number attached (very useful where a large number of birds are kept), 1d. each. Postage extra, or 70 Rings post free for 5/- Several sizes are kept in stock for marking turkeys, geese, ducks, fowls, and bantams.

FLINT DUST.

Is invaluable for laying fowls, strengthening the egg organs even better than bone meal.

Prices:—2/6 28 lbs.; 4/- ½ cwt.; 8/- 1 cwt.

W. Cook & Son, Orpington House, St. Mary Cray.

German Moss Peat Litter

———— :o: ————

Moss Peat, instead of dust, ashes, or lime, in the house, is the greatest boon to poultry-keepers. It saves time, keeps the house clean, and is in every way a comfort to the fowls themselves. See remarks on this subject in the "Poultry Breeder and Feeder." If the houses are cleaned out three or four times a year, it is quite often enough, as the peat does away with all smells, an occasional stir up being all that is required. When once used, a poultry-keeper would not be without it for anything.

Sold in half-hundredweight bags ...	**3/3**
Three Bags	**9/-**

Bag and free delivery in Carter Paterson's London District included.

Bales weighing from 2 to 3 cwt. ...	**9/-**
By the ton	**45/-**
,, half-ton	**23/-**

Purchasers must pay carriage on these quantities.

GRIT FOR FOWLS.

———— :o: ————

This is most essential in the poultry yard for fowls, turkeys, ducks, and geese, particularly when eggs are required during the winter.

W. Cook & Son supply flint grit for fowls, turkeys, pigeons, chickens, and cage birds. State which it is required for when ordering.

Prices :—12/- per cwt.; 6/6 half; 4/- quarter.

W. Cook & Son, Orpington House, St. Mary Cray.

W. COOK & SON'S

INSECT POWDER.

A certain destroyer of all insects on poultry, and should be used in the nest boxes and any crevices where vermin are likely to be found.

Sold in tins, 8½d., 1/3, and 2/4½, post free.

W. COOK & SON'S

OINTMENT FOR SCALY LEGS.

For rubbing in scaly legs.

In tins, 8½d. and 1/3 post free.

Roup Pills in 7½d., 1/1½, 2/2, and 3/3 boxes, post free.

EMBROCATION

For Cramp, Sprains, Leg Weakness, &c., 9d. and 1/3 per bottle, post free.

Ointment for destroying Nits on Fowls.

:o:

Prepared especially for destroying nits on poultry, which are usually found round the head and under the throat. It is most efficacious, and if used according to the directions, will destroy every nit. It should be rubbed in carefully as far as the nits extend. It does not injure birds in any way. Every bird should also be carefully dusted over with W. Cook and Son's Insect Powder.

Sold in 6d. and 1/- bottles. Post free, 9d. and 1/3.

W. COOK & SON, ORPINGTON HOUSE, St. MARY CRAY, KENT.

PRICE LIST OF MEAL AND CORN.

	1 cwt.	½-cwt.	¼-cwt.
Poultry Biscuit Meal	17 0	8 10	4 8
General Meal...	12 6	6 6	3 6
W. Cook's Special Poultry Meal	15 0	7 9	4 0
W. Cook's Duck Meal...	14 0	7 6	4 0
Fattening Meal for Ducks	14 0	7 0	4 0
Bone Meal	14 0	7 0	3 9
Granulated Meat	21 0	10 6	5 6
Ground Oyster Shells	8 0	4 6	2 6
Flint Grit for Fowls, Pigeons, Cage Birds and Chickens	12 0	6 6	4 0
Flint Dust	8 0	4 6	2 6

Delivered free to any Railway Station in England and Wales. Half carriage paid on 1 cwt. bags to Customers in Ireland and Scotland.

	Sack.	½-Sack.	Bush.
Wheat (Best)	16 0	8 0	4 6
Buckwheat (best French)	18 0	9 0	4 6
Barley	18 0	9 0	4 6
Maize (Small Round)	18 0	9 0	4 6
Dari	18 0	9 0	4 6

Groats (Whole) extra quality, 19/6 per 112 lbs.; 10/- per 56 lbs.; 5/3 per 28 lbs.

Carriage paid ONLY within the delivery of Carter Paterson & Co.

Orders for CORN cannot be executed unless a remittance for Sacks or Bags accompanies the orders.

Sacks charged 1s. 4d., 1-Bushel Bags 6d. each, but allowed for when returned to London Warehouse.

CASH TO ACCOMPANY ALL ORDERS.

W. Cook will be glad if Customers will specify the Station to which their Goods should be addressed to avoid errors.

Customers favouring us with orders for Meals, Corn, and Moss Peat, should write direct to 105, Borough, S.E. By doing so, great delay is saved, as sending to the Poultry Farm necessitates the re-posting of these orders to our London Warehouse.

The most successful breeder of the day says :—"The Firs, Highbridge. —DEAR MR. COOK,—I have now used your Biscuit Meal for poultry over four years, and have much pleasure in stating that it has given me entire satisfaction. I have recommended it to a large number of my friends in the fancy, who are now using it with success.—Yours faithfully, A. G. PITTS."

W. COOK & SON, ORPINGTON HOUSE, St. MARY CRAY, KENT.

W. COOK & SON'S POULTRY POWDERS.

These Powders are invaluable for bringing fowls on to lay as they strengthen the egg organs without injuring the birds. They are splendid for Young Chicks and Turkeys, and should be given in the soft food in the morning, particularly whilst the birds are under two months old. When they have these powders it is very seldom they have gapes. For stock birds they are invaluable, and should be given to birds which are moulting. We have received many hundreds of unsolicited Testimonials as to their efficacy.

Sold in Tins, 9d., 1/3, or 5/-, post free; 12/- Tin for 10-/, carriage paid. Cash must accompany order.

POULTRY POWDER TESTIMONIALS.

Mr. W. Cook,

SIR,—Will you please send us 10/- worth of your poultry powder. I think you have it in 1/- tins, if so will you send these, if not a larger tin will do. We only began to use it about this time last year, we were not getting any eggs at the time, but it brought them on laying, and we have never been without eggs since, and they are doing well at the present time.

Yours respectfully,
A. HOLDEN.

Messrs. W. Cook & Son,

DEAR SIRS,—I have received the tin of poultry powders, if I enclose a P.O. for 1/3 that will make it right. I like them very much, and find them first class for chickens.

Yours truly,
CHAS. CLARIDGE.

SIRS,—I enclose 10/- P.O. for you to send me twelve tins of your poultry powders, as I find it good for producing eggs. Kindly send by return.
JANE JONES.

W. Cook & Son, Orpington House, St. Mary Cray.

DEAR SIR,—I thank you for your prompt attention to my small order. The three birds arrived safely, and are in splendid condition. They appear to be very good birds. The boxes are returned. I can recommend the use of your Poultry Powder for promoting the general health of fowls, and also to induce laying during the cold months of the year. Your book is a good work of reference for poultry keepers. I get each edition as published, giving away the previous one to any of my friends who may not happen to have it.

Yours truly,
THOS. HARDY.

DEAR SIR,—I have tried your poultry powder and find it is most satisfactory. All my hens have layed and sat and left chicken, and are sitting again since I had a 5/- tin a short time back. I have spoken to several of my friends and they tell me they have sent for a tin and all theirs have commenced to lay. I will gladly tell anyone how beneficial your powders are.

Yours truly,
MISS BRAKEFIELD.

W. COOK & SON'S
ROUP POWDERS.

These Powders are excellent for birds with colds and roup. When fowls are out of sorts, more particularly when they cough and sneeze a little, the powders should be used at once, they have saved the lives of thousands of young birds. A preventive is better than a cure, though the powders will often cure the worst cases of roup. They should be mixed in the soft food of a morning, about four times a week, and that will prevent the disease from spreading. Many breeders use these powders for getting their birds into condition for show purposes, as they impart a splendid gloss to the plumage. When the birds have a thick mucus round the mouth the Roup Lotion should be used, **10½d.** per bottle, post free.

Prices :—In Tins, 8½d., 1/3, 2/4½, and 5/-, post free; or 12/- Tin, carriage paid, for 10/-.

SPECIAL QUOTATIONS FOR LARGER ORDERS.

W. COOK & SON, ORPINGTON HOUSE, St. MARY CRAY, KENT.

ROUP POWDER TESTIMONIALS.

To Messrs. Wm. Cook & Son,

DEAR SIRS,—I have for some time been thinking of sending you a testimonial for your roup powders, having as you would see by letter to *Poultry* in February, had over a 100 birds in January affected very badly with roup. They were *cured very qnickly* without losing a single bird by using one 1/- tin, mixed with liverine, made into pills. The birds of course were shut up directly they were seen to be affected. Some of them were quite blind for two or three days and had to be crammed. I think it speaks well for the efficiency of your roup powders

Yours truly,

RICHARD FOSTER

DEAR SIR, —Will you please send me one tin of roup powder, for which I have enclosed 2s. 4½d. I find it works wonders with the fowls.

Yours sincerely,

ANNIE SHEPHERD.

W. COOK & SON'S FATTENING POWDERS.

These powders are very useful in assisting poultry to put on fat and to keep them in health at the same time; they give them a keen appetite, and assist digestion.

For 12 Fowls, one dessert-spoonful three times a week

,, 10 Ducks, ,, ,,

,, 6 Turkeys ,, ,,

Sold in Tins, post free, 1s. 3d., 5s. and 10s.

SPECIAL QUOTATIONS FOR LARGER ORDERS.

W. Cook & Son, Orpington House, St. Mary Cray.

LECTURES.

W. COOK gives Lectures on Practical Poultry Keeping and management, throughout the Country. His object is, as fully expressed in his book, to draw the attention of farmers and working men to this easily-attained means of adding to their income. Write for terms. Special arrangements made with Secretaries of Technical Education Committees or Poultry Societies for Courses of Lectures.

ADVICE & CONSULTATION.

W. COOK & SON give information free to all poultry keepers and duck rearers on the management of poultry, also answer any question by stamped and addressed envelope. All communications concerning this should be addressed to Orpington House, St. Mary Cray, Kent. They also travel to all parts of the United Kingdom for the purpose of planning-out poultry farms and runs, mating breeding birds, &c., for the nominal sum of £1 1s. and travelling expenses.

PUPILS.

W. COOK & SON have vacancies for pupils to teach them the rudiments of poultry farming. It is wise for those who have had no previous experience to avail themselves of the advantages for practical training which their extensive poultry farm offers. The fee is only ten guineas, and W. COOK & SON have had a large number of ladies and gentlemen during the last few years, to learn poultry farming, many of whom are now doing well for themselves. Pupils can either stay three weeks or six months, and gentlemen will find it pleasant and instructive to spend their holidays on the farm. For full particulars write to Orpington House, St. Mary Cray.

W. COOK & SON are always pleased to show visitors over their poultry farm at St. Mary Cray, and give advice on all matters relating to poultry keeping. Intending purchasers will do well to visit these yards, as there are over 6,000 birds on view, at various prices. Eggs can be taken away by visitors.

There is 6d. porterage to be paid on Telegrams, which *must* be prepaid. Telegraphic address:—"COOK, ST. MARY CRAY."

"Orpington House" is situated a mile and a half from St. Mary Cray Station, on the L.C. & D. Railway, and 2 miles from Swanley Junction on the same line, and 3 miles from Orpington Station, on the S.E. Railway. Cabs from each Station.

W. Cook & Son, Orpington House, St. Mary Cray.

THE VICTORIA

Poultry Food, Pheasant Meal, Game Meal, Etc.,

ARE THE BEST.

SOLE MAKERS—

SPILLERS & BAKERS, LTD., CARDIFF & BRISTOL.

THE NORCOMBE SMASHER

is not a toy. It is the most powerful and cheapest implement in the world for obtaining crushed oyster-shells, sharp and rough grit, by a little labour It is also invaluable for smashing bones for bottoming plants, soups, stocks, etc. A labourer broke 2 cwt. of oyster-shells for 2/2. The Editor of *Fowls* says:—"Norcombe's Patent Smasher is a really useful article, and should find a place in every Poultry Yard. Bones, oyster-shells, and flints crumble to a nice size for Poultry when operated upon with the well-known Smasher. A fowl without sharp grit is in the same straits as a man without teeth. Mr. Norcombe might style himself the fowls' dentist."

Testimonial from the Editor of *The Cable* (Earl Winchilsea);—"We have received a sample of the Norcombe Patent Smasher, an ingenious machine for effecting this, which is both simple and cheap, and which we advise every reader of *The Cable* who keeps poultry to possess. To continually buy grit and crushed oyster shell is a heavy item, and there is no need for it when a machine like the 'Norcombe' can be purchased for so small a sum. Broken crockery can be utilised instead of thrown away, and will serve the purpose of food 'grinders' equally well." Again,

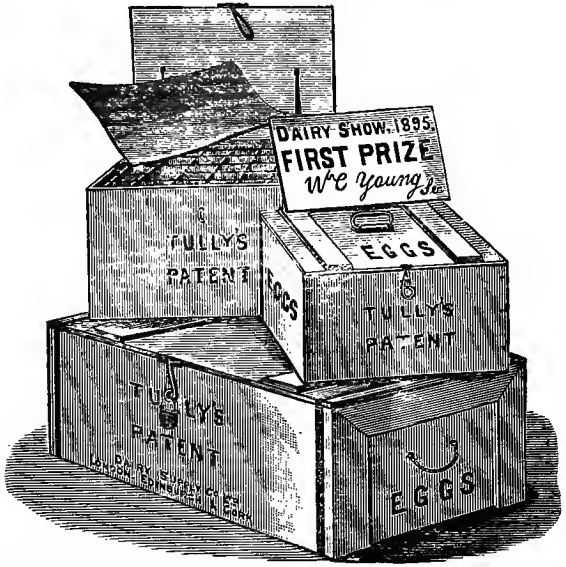
Messrs. W. Cook & Son, the large Poultry Breeders, say:—"We always recommend your valuable Grit Smasher to anyone requiring a Smasher."

POST FREE, 3/6.

EDMUND NORCOMBE,E, 70, GRANBY ST., LIVERPOOL.

SAFETY EGG BOXES

TULLY'S PATENT.



MR. E. HALL, FARNBOROUGH, HANTS., writes—"I have used your Egg Boxes for six months, and have not had an egg broken."

MR. C. PRIDEAUX, MOTCOMBE, SHAFTESBURY, writes—"These boxes are very safe for the conveyance of eggs; we never get any broken now."

SPECIAL LIGHT BOXES FOR PARCELS POST.

Sole Licensees in Great Britain—

THE DAIRY SUPPLY Co., Ltd.,

MUSEUM ST., LONDON, W.C.

THE PROBLEM SOLVED. CHICKENS ALL THE YEAR ROUND.

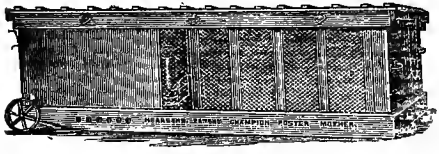
Hearson's Patent Champion Incubators

ARE ALL FITTED WITH COPPER TANKS.

They are the most complete and only ones which are Thermostatic. We supply the world with Incubators, and all who use our Machines acknowledge them to be without a rival.

BEWARE OF WORTHLESS IMITATIONS.

The CHAMPION has now superseded all others, as since its introduction no other Incubator maker in the world has been awarded a first prize at any show at which this apparatus has been entered for competition. It is the only Incubator in the world sold with a guarantee not to vary 5 deg. for 12 months together without readjustment, and in no other Incubator is the ventilation and damping so scientifically and practically carried out.



HEARSON'S PATENT CHAMPION FOSTER MOTHER

Made in one size only, for 50 Chickens; measuring about 6ft. 6in. by 2ft. 6in. and 26in. high.
A Masterpiece of Construction.
A Paradise for Chickens.

HEARSON'S PATENT CRAMMING MACHINE

For the Forced Feeding of Fowls, Turkeys, &c.

Try our "Eureka" Poultry Meal, 16/- cwt.

Illustrated Price List, One Stamp. Mention this book.

CHAS. HEARSON & CO., LTD.,

235, REGENT STREET., LONDON, W.

BOULTON & PAUL,

MANUFACTURERS, NORWICH.

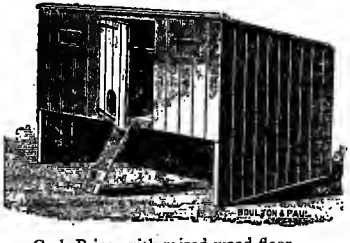
CHEAP FOWLS' HOUSES. Prices specially Reduced to come within the reach of all Classes of Poultry Keepers.

These Houses are not morticed and tenoned, but are constructed of matchboarding well nailed to ledges, and painted one coat. Whitened inside. Strong hinges and lock to door, and including nests and perches.

No. 31. New Portable Double Span-Roof Fowl House.

Cash Price (with raised wood floor), Carriage Paid. Double House.
Each House 6 ft. by 4 ft., £4 17 6

No. 32. New Portable Lean-to Fowl-House.



Cash Price, with raised wood floor, Carriage Paid.

Size, 6 ft. by 4 ft., £2 2 6

No. 34. Cheap Lean-to Fowl House.

Cash Price, without floor.
Size, 5 ft. 0 in. by 4 ft. 0 in. by 4 ft. 9 in. to Eaves, £1 5 0

No. 33. Cheap Span-Roof Fowl House.

Cash Price, without floor.
Size, 5 ft. 0 in. by 4 ft. 0 in. by 4 ft. 9 in. to Eaves, £ 1 10 0

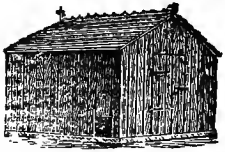
All Orders amounting to 40/- Carriage Paid to the principal Railway Stations in England & Wales

Send for Illustrated Catalogue free on application.

BOULTON and PAUL, NORWICH.

The Bellevue Ordinary Poultry House (Registered),

Is the Cheapest House in the Trade,

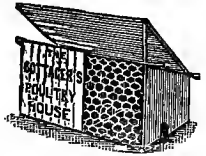


And perfectly Weather and Draught Proof.

To hold 50 Fowls; 9ft. long, 6ft. wide, 6ft. 8in. high. Price 50s. Carriage Paid.

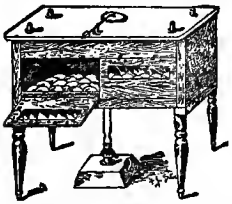
The Cottager's Poultry House and Cold Rearer.

Awarded Silver Medal, Highest Award, at Dairy Show, October, 1893.



Fitted up complete 21s., Carriage Paid. To hold 16 Fowls or 60 Chickens. Requires no cleaning out. Is the most common-sense house ever offered to the public, and the best way to keep both Chickens and Fowls healthy, is by removing them to fresh ground daily. On wheels, 4s. extra.

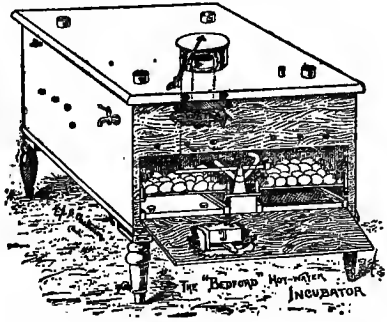
The "Conqueror" Hot-Air Incubator.



The "Conqueror" Hot-air Incubator is the simplest and easiest to work ever made. No amp fumes can possibly get into the egg chambers, and the temperature is perfectly even from end to end. It is the most perfect and reliable machine ever invented, and when it once gets known will recommend itself. After eighteen months' trial I can safely say it has no rival, as results will prove to all purchasers of same.

Prices—26 Eggs, £3 5s.; 50 Eggs, £4; 100 Eggs, £5. Cases, 3s. 6d., 5s., and 7s. 6d. extra. Carriage Paid.

THE NEW PATENT Hot Water Incubator "The Bedford,"



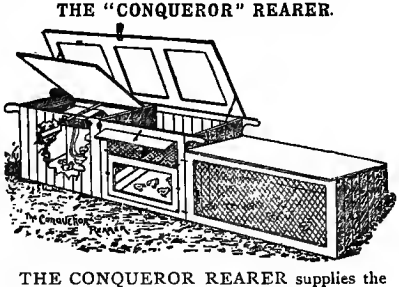
Is, like the "Conqueror," A MARVEL, and with its even temperature all over, combined with a most sensitive Regulator, it is bound to become a GREAT FAVOURITE (as its hatching results so far have EXCEEDED ALL EXPECTATIONS).

50 Eggs, £5 5s.; 100 Eggs, £7; 200 Eggs, £10.

Cases, 5/-, 7/6, and 10/- extra, and not returnable

Carriage Paid.

THE "CONQUEROR" REARER.



THE CONQUEROR REARER supplies the missing link to make Poultry Farming pay. It is perfectly storm-proof, and chickens can be reared in it with certainty in the coldest and worst of weathers, as it not only keeps all cold air out of sleeping chamber by having separate lids, but the glass doors keep cold winds, etc., from the grass run and tempts them outside of hot chamber. On account of its being so easily moved daily on to fresh ground, sickly chickens will be a thing of the past, and quite unknown wherever this machine is used.

Prices—for 50 Chicks, 40/-; for 100 Chicks, 50/-; carriage paid. With 6 ft. Run, 7/6 extra. On wheels, 4/- extra.

W. W. GREENWOOD, 46, Prebend St., Bedford.

The Most Successful Rural Journal

EVER PUBLISHED IN GREAT BRITAIN.

Farm Field & Fireside

An Agricultural, Rural, and Domestic Journal,

For the Country Gentleman, Farmer, Rural & Suburban Resident,

AND ALL INTERESTED IN

THE FARM, THE DAIRY, LIVE STOCK, THE STABLE,

POULTRY,

GARDEN, OR THE HOME.

In all cases where possible, it is advisable to obtain the Paper through a Newsagent, Railway Bookstall, or Bookseller. If, however, it is not obtainable at the published price, it can be ordered direct from the Publishing Office, post free, at the following rates, payable in advance :—

ONE YEAR, 6/6. HALF-YEAR, 3/3.

A JOURNAL FOR EVERYBODY.

QUERIES AND ANSWERS.

Especial attention is called to this feature of the paper, as the columns of every department of "Farm, Field & Fireside" are freely open to all, and offer a means of exchanging opinions and obtaining information such as can be met with in no other way.

PARTICULAR NOTICE is directed to the Advertising Columns. More business is done through these Columns by Poultry Keepers than in any other way. Terms : 6d. per line. Minimum Size allowed : 4 lines being 2/- per insertion.

N.B.—"Farm, Field, and Fireside" is the only Paper offering **32 Pages of well-printed useful information** in a handy, compact form, illustrated, stitched and cut, for the sum of

ONE PENNY.

Specimen Copies can be obtained from Newsagents, Booksellers, and Bookstalls, or direct from the Publishing Office,

1, ESSEX STREET, STRAND, LONDON, W.C.

GIVE AS THE MORNING FEED

SPRATT'S PATENT POULTRY MEAL

AND OCCASIONALLY ADD

GRANULATED PRAIRIE MEAT.

Trade CRISSEL, Mark.

In the proportion of one part Crissel to eight parts Poultry Meal.

A pure preparation of Meat taking the place of Insect Food.

See you get it IN SEALED BAGS or in 3d. SAMPLE PACKETS.

CARDIAC,

A Non-Poisonous TONIC POWDER.

Dust a little over the soft food.

IN PACKETS AND IN 7lb. BAGS ONLY.

Pamphlet on Poultry Rearing, Post Free, of

SPRATT'S PATENT, LIMITED,

Bermondsey, London, S.E.

Reared from Shell to Show Pen

ON

SPRATT'S PATENT CHICKEN

AND

POULTRY MEALS.

Samples of Foods Post Free. **Pamphlet on Poultry Rearing Post Free for One Stamp.**

Address Sample Department:

SPRATT'S PATENT LTD., Bermondsey, London, S.E.